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MOUNT McKINLEY
AND
MOUNTAIN CLIMBERS' PROOFS

EDWIN SWIFT BALCH

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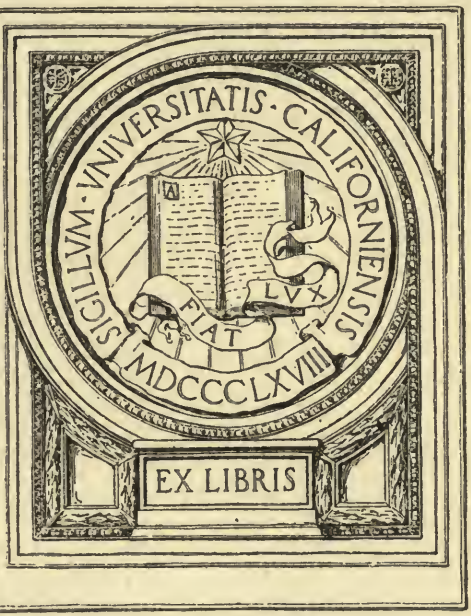
Edwin Swift Balch



MOUNT McKINLEY

AND

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OTHER WORKS BY THE AUTHOR.

Mountain Exploration.....Bull. Geog. Club of Phila., 1893.
The Highest Mountain Ascent, etc.....Pop. Sci. Mon., 1895.
Ascents near Saas.....Appalachia, 1896.
Ice Cave Hunting in Central Europe..... " 1897.
Reminiscences of Tyrol..... " 1898.
High Mountain Ascents..... " 1909.
Ice Caves and the Causes of Subterranean Ice.....J. Franklin Ins., 1897.
Subterranean Ice Deposits in America..... " 1899.
Antarctica: A History of Antarctic Discovery.... " 1901.
Roman and Prehistoric Remains in Central Germany " 1903.
Antarctica Addenda..... " 1904.
Savage and Civilized Dress..... " 1904.
Develop the Submarine..... " 1909.
Antarctic Exploration.....Sci. Am. Sup., 1902.
Termination Land.....Nat. Geog. Mag., 1904.
Arctic Expeditions sent from the American Colonies.
Penn. Mag. H. & B., 1907.
Art in America before the Revolution.....Soc. Col. Wars, 1908.
Art and Ethnology.....Proc. Am. Phil. Soc., 1907.
Why America should Re-explore Wilkes Land.. " " " " 1909.
Wilkes' Antarctic Discoveries.....Science, 1911.
The Highest Mountain Ascent.....Bull. Am. Geog. Soc., 1904.
Crocker Land..... " " " " 1907.
Stonington Antarctic Explorers..... " " " " 1909.
Charcot's Antarctic Explorations..... " " " " 1911.
Palmer Land..... " " " " 1911.
Hudson Land..... " " " " 1911.
Antarctic Names..... " " " " 1912.

etc.

Mount McKinley

and

Mountain Climbers' Proofs

BY

EDWIN SWIFT BALCH

Author of
Glacières or Freezing Caverns, 1900
Antarctica, 1902
Comparative Art, 1906
The North Pole and Bradley Land, 1913

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MOUNT McKINLEY
AND
MOUNTAIN CLIMBERS' PROOFS.

I.

MOUNTAIN CLIMBERS' PROOFS.

Mountain ascents were few and far between before the middle of the nineteenth century A. D. Occasionally only, some solitary individual became sufficiently interested in some mountain or other to try to reach its summit. The great public took no interest whatever in mountains. With the increasing congestion of population in huge cities, however, it became more and more usual for people to take breathing spells in the country, and some of these persons found their legs a pleasant means of locomotion. In time it was discovered that rocky fastnesses offer specially favorable ground for stretching the muscles of the lower limbs, and certain men began to try to reach craggy or snowy summits as a relaxation and a sport. The number of these men increased. Finally, between 1856 to 1858, the English Alpine Club was formed,[1] and following this example, other Alpine Clubs were gradually founded.

[1] William Longman: "Modern Mountaineering and the History of the Alpine Club": *The Alpine Journal*, 1878, bound with Vol. VIII, pages 83–94.

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The number of persons interested in mountaineering increased by leaps and bounds in the latter half of the nineteenth century, and with the steady expansion of mountain-club memberships, there grew up an increasing desire to make first ascents, that is, to be the first person to tread on a virgin peak. After all the big peaks of the European Alps were ascended, European climbers who could go no farther afield began to ascend smaller peaks, until to day the merest rocklet is sought out in the search for novelty. Climbers with larger bank accounts turned their attention to big peaks in all parts of the world. The Rocky Mountains, the Andes, the Caucasus, the New Zealand Alps, the African snowy ranges, the Himālaya, all have been attacked and some of their peaks at least have borne the imprint of hobnailed shoes.

As a rule, the reports of the ascents of mountains have been accepted as veracious by the mountaineering fraternity. Occasionally, however, there has been trouble and quarrels about whether Mr. So and So did or did not ascend Peak Such and Such; and in all such controversies the non-mountaineering portion of mankind has not taken the slightest interest. The reason for this is, perhaps, that the ascent of a mountain is a trivial thing to men in general. The exploration of a big range of mountains, the surveying and charting of a number of high peaks, may be a matter of some im-

portance as a work of exploration, in opening new districts and widening knowledge of the earth. But the ascent of the average mountain at the most amounts to being only a tiny fragment of geographical discovery.

But altho of no interest to the general public, mountain ascents are of absorbing interest to the coterie of mountain climbers. For however unimportant ascents may be in themselves, still first ascents are a small part of the great subject of the discovery of the world. And they are the part which mountain climbers think about. Every new ascent is one link in the entire chain of mountain history, and every new ascent reduces the field a trifle for other climbers. Moreover, mountain climbers are desirous to have the history of mountain climbing accurate, and thus it comes about that a good deal of time and effort is devoted to getting all the attainable facts about the ascents of the various peaks.

When now one considers the immense amount of literature extant about mountains, and the fact that a certain number of ascents have been denied and the climbers doubted, it seems passing strange that so little has been written about the proper methods of solving disputed ascents. Many ascents have been examined into, the evidence analyzed, and in time some sort of satisfactory result reached, yet but little has been done so far in dis-

cussing collectively the various points which may be taken into account in any attempt to get at the truth in regard to mountain climbs. To the best of my knowledge, the mountaineering world still needs a thoroly philosophical study of this special subject. And some day perhaps some elaborate treatise may fill the lacuna.

But why should the reports of climbers be disbelieved in? Why should otherwise respectable persons be doubted if they assert they have been up some mountain? And the answer is that various causes contribute sometimes towards discrediting mountain climbers. Hesitation to accept travelers' tales, ignorance of mountains and mountaineering, and jealousy may be mentioned as perhaps chief among these causes. Much of the disbelief originates among the natives dwelling in the neighborhood of the peaks. It is a universal characteristic—found in Switzerland, in Tyrol, in the Caucasus, at Mount Ararat, in the Himālayas, in the Andes, and now in Alaska—of the humans inhabiting the plains and valleys near great peaks whose ascent they have not themselves made, to assert that others also have not made the ascent. These assertions sometimes convince other persons who do not live in the locality and gradually spread to a wider and wider circle.

That the natives of mountain districts frequently exhibit ignorance and distrust about the

ascents of the peaks round their own valleys and that this distrust slowly spreads to other localities was forcibly brought home to me by an occurrence which happened about one of my own climbs. On the 26th of June, 1882, I made the second or third ascent and first traverse, ascending by the south arète and descending by the north arète, of the Portienhorn, or Portiengrat, or Pizzo d'Andolla, 12,010 feet, which rises on the Swiss-Italian frontier between the Saas Thal and the Val d'Antrona. My guides, Franz Burgener and Alois Anthamatten, assured me that they knew of no previous ascent. As far also as I have been able to learn since, at the time of our ascent, no record of any previous ascent had been published. On writing for information to the editor of *The Alpine Journal,* he informed me that the Portienhorn had been ascended some years before, and also published the following brief note of my ascent: "The same party also made the first ascent of the second peak of the Portien Grat".[2] Though why he should credit me with the first ascent of the second peak of the Portienhorn is not apparent, since there is no second peak of the Portienhorn!

I did not publish any account of this ascent until 1896, when I did so in an article entitled "Ascents near Saas."[3] In 1900, I published a

[2] *The Alpine Journal,* 1882, Vol. XI, page 117.
[3] *Appalachia,* Vol. VIII, pages 157–164.

book called *Glacières or Freezing Caverns* and in it described, among other caves, the Schafloch, above the Lake of Thoune. A Swiss climber wrote to me about this, and our correspondence led to my sending him a copy of "Ascents near Saas". He wrote me almost by return mail a letter saying how pleased he was with its contents, because Burgener and Anthamatten had claimed for many years that they had ascended the Portienhorn, and that no one had believed them. My quite unintentional testimony thus fortunately eventually vindicated these two worthy fellows' veracity.

Some of the early high ascents were disbelieved in, because of the universal consensus of opinion that man could not reach such altitudes on account of the rarefied air. Such was the case, for instance, in regard to the ascent in 1865 of peak E. 61, 23,890 feet, in the Kuen Lun, by Mr. W. H. Johnson, of the Indian Survey. His account of the ascent was never published, and it seems almost certain, from Dr. Longstaff's investigations, that General Walker, Mr. Johnson's chief, disbelieving in the possibility of anyone reaching an altitude of 23,890 feet, simply suppressed Mr. Johnson's report.[4]

Mr. W. W. Graham's successful ascent in 1883 of Kabru, 24,015 feet, in the Sikhim Himālaya is another famous instance of disbelief in a climber.[5]

[4] *The Alpine Journal*, 1909, Vol. XXIV, page 133.
[5] *The Alpine Journal*, 1886, Vol. XII, pages 25–52.

Graham was violently abused, principally by some Anglo-Indian travelers, who displayed a bitter jealousy of him and a total ignorance of mountaineering. One critic attacked him for crediting himself with the ascent of Pandim, which Graham looked at only from a distance and described as a peak of extraordinary difficulty. Another critic said Graham could not have climbed Kabru, because "no amount of skill and experience can avoid the almost certain consequences of an attempt to clamber over sharp ledges of rock, and of the yielding of the snow-coating that covers over a concealed crevasse".[6] The public verdict was that no one could breathe at 24,000 feet and therefore that Mr. Graham could not have made the ascent. Nevertheless a few years ago Messrs. Rubenson and Monrad-Aas made a second ascent of Kabru,[7] and only the other day the Duke of the Abruzzi reached 24,600 feet on Bride's Peak.[8]

Occasionally disbelief in ascents originates from ascents having been made at different seasons of the year. A high mountain side or a high mountain top is often different at the end of June from what it is at the beginning of September. The June traveler may perhaps find a mountain wholly

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[6] *The Alpine Journal*, 1886, Vol. XII, page 100.

[7] *The Alpine Journal*, 1909, Vol. XXIV, pages 310–321.

[8] Filippo de Filippi: *Karakoram and Western Himalaya*, 1912.

snow covered while the September traveler may perhaps find bare rocks sticking up thru the snow. Their accounts of the details of their experiences necessarily vary and are colored by small circumstances which were at variance largely owing to the different months of the year. Thereupon ignorant critics sometimes claim that one or the other of the travelers manufactured his narrative; that both narratives cannot be genuine.

That the character of a mountain climb may be greatly altered by the season of the year may be shown by the following instance drawn partly from my own experience. Mr. Thomas Brooksbank, on the 1st of September, 1874, crossed the Rossbodenjoch from Simplon to Saas. In his account,[9] he speaks almost entirely of rocks: "Half an hour across the glacier, and we were at the foot of those precipices, sheer up which we climbed, hand and foot, for exactly two hours and a quarter. The rocks were very steep and here as at the Laquin Joch there are always 'schauerliche Abgrunden'; but with a steady head and a plentiful allowance of time, there ought to be, there can be, no danger. Yet there is some difficulty, and one almost sheer cliff, which, by comparing it with the length of rope we were using, we took to be 40 feet, cost us a good half hour * * *. The rest of our climb was only fair work. At half past 10 we had sur-

[9] *The Alpine Journal*, 1875, Vol. VII, page 133.

mounted the precipice, and were level with the Gamser Glacier, high above its icefall."

On the 22nd of June, 1882, I followed Mr. Brooksbank's track across the Rossbodenjoch. My own account, written down the next day but published only in 1896,[10] reads quite differently from Mr. Brooksbank's account. We had far more snow: "There was a big couloir, but the guides declined it, as the snow was in bad order, and turned to some stiff rocks in preference. At the top of the rocks we struck a snow slope with more steep rocks above. The state of the snow bothered us a great deal, and little avalanches were perpetually tumbling down during the ascent. * * * Then we got on well enough for a while * * * until the rocks overhung. We sat on a little bit of a ledge. A narrow and exceedingly steep couloir came down beside us and must be crossed * * *. After the successful passage of this exceedingly *mauvais pas*, we had another terrifically steep, nasty, and wet snow slope. While taking breath, I said to Burgener 'How can you always tell about the snow being safe,' and he replied 'If I could not, I should have died at least two hundred times already'". It is obvious that Mr. Brooksbank and I both must have aimed for the lowest gap between the Rossbodenhorn and the Rauthorn, and therefore that our routes must have been nearly the

[10] *Appalachia*, Vol. VIII, pages 159, 160.

same, and yet, owing to the difference in snow conditions due to the difference in the time of the year, our narratives certainly do not read alike.

Jealousy and envy have been in certain cases the underlying motives in discrediting first ascents or in giving credit to the wrong person. Chief among such ascents is the first ascent of Mont Blanc. The great Swiss scientist de Saussure gave the first impulse for its ascent. He visited Chamonix in 1760 and 1761, and offered a large reward to any one who should discover a route to the summit. Numerous attempts to ascend the mountain were made, several by guides without travelers, two by Mr. Bourrit, and one by de Saussure and Bourrit. Finally Mont Blanc was ascended on the 7th of August, 1786, by Dr. François Paccard and Jacques Balmat.[11] Every detail usually accepted about this first ascent is wrong. And the accepted version is so different from the reality that a brief resumé of the matter should be instructive.

The accepted version gives all the credit of the ascent to the guide Jacques Balmat and makes his companion Dr. Paccard into a feeble-bodied weakling. Balmat is said to have discovered the route and to have asked Paccard to accompany him. When nearly at the top Paccard is supposed

[11] William Longman: "Modern Mountaineering and the History of the Alpine Club": *The Alpine Journal*, 1878, bound with Vol. VIII, pages 5, 6.

to have become so exhausted that he dropped on to the snow and that Balmat arrived first alone at the summit. Nevertheless, when Balmat returned to Paccard, he took hold of him and by main force literally dragged him to the summit. The next day the doctor is said to have been so completely snow blind that he entered Chamonix hanging on to the strap of his guide's knapsack.

The reality was far different. For Paccard and Balmat were watched from Chamonix thru a telescope by Baron von Gersdorf, a German traveler of repute. He saw them at the Petits Rochers Rouges, then "from there they started again at 5.45, rested at about every hundred steps always for a moment, changed several times the leadership, at 6.12 arrived at two little rocks sticking out of the snow, and at 6.23 reached the highest summit". Von Gersdorf not only wrote this account down in his diary, but he and his traveling companion, von Meyer, at the request of Dr. Paccard's father, a notary at Chamonix, signed a certificate, which is still preserved at Chamonix, giving an account of what they had seen. Far from Balmat being a hero and Paccard a *crétin*, all the evidence tends to show that Paccard was the leader thruout. But only von Gersdorf and his spyglass saved the truth from oblivion.

All the rubbish of the accepted version originated with a man, Marc Théodore Bourrit, who tried

to make the first ascent of Mont Blanc. Disappointed in his attempts and actuated by envy and jealoûsy, Bourrit went to work and by skilful writings succeeded in damaging Paccard sufficiently to prevent Paccard from obtaining subscriptions for a narrative of his ascent. Later, in 1832, Alexandre Dumas interviewed old Balmat and out of Balmat's garbled reminiscences and Bourrit's vaporizings, constructed a narrative *à la Monte Christo* which gained universal credence. It is thanks to several mountain historians, chief among them Dr. Heinrich Dübi, Mr. Montagnier, Mr. Mathews, Mr. Gribble and Mr. Freshfield, that the truth about the first ascent of Mont Blanc has recently been established and the fogs which obscured it so long have been swept away.[12]

It occasionally happens also, fortunately but rarely, that the climbers who make the second or third ascent of a mountain empirically assert that their predecessors did not reach the real top. Such was the case, for instance, about the first ascent of the difficult Piz Roseg, in the Engadine. This was climbed by Messrs. A. W. Moore and Horace Walker with the first-rate guide Jakob Anderegg in 1865, and a full account of their ascent was published in 1867.[13] In the face of this, Dr.

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[12] *The Alpine Journal*, 1913, Vol. XXVII, pages 202–209.

[13] *The Alpine Journal*, 1867, Vol. III, pages 19–24.

Paul Güssfeldt, an excellent climber, who ascended Piz Roseg in 1869, asserted, in an account of his ascent published in 1870, that Jakob Anderegg alone reached the summit, and that Messrs. Moore and Walker only reached a secondary summit, some distance from the main summit.[14]

Another example of this peculiar form of mental mountain sickness, which sometimes follows a successful ascent, happened in regard to the Grand Teton in Wyoming, probably the hardest climb outside of Alaska in the United States. The Grand Teton was climbed in 1872 by Captain James Stevenson and the Hon. Nathaniel P. Langford, one of the founders of the Yellowstone National Park. A full account of the ascent was published by Mr. Langford, and this account rings true.[15] Mr. Langford says positively that they "stepped upon the highest point of the Grand Teton." And strange to say, they found near the top an enclosure, evidently man's handiwork, of granite slabs much disintegrated, this showing great age; but who made this enclosure is unknown. The peak was climbed again in 1898 by Mr. W. O. Owen, who empirically denied that Messrs. Stevenson and Langford had reached the top, but whose account nevertheless, in every respect and im-

[14] *The Alpine Journal*, 1872, Vol. V, pages 373, 374.

[15] "The Ascent of Mount Hayden," *Scribner's Monthly*, June, 1873, pages 129–157.

portant detail, entirely corroborates all the statements of Mr. Langford.[16]

In examining into the proofs about ascents, it will be found, I think, that, leaving the personality and veracity of the climbers out of the question, there are comparatively few evidences which can be presented which afford absolute, mathematical proof.

In a former work I made the statement that "The ascent of Mount McKinley by Cook can never be proved or disproved, unless perchance there is a big enough stoneman on top to withstand Alaska storms".[17] Careful investigation for over a year into this particular subject and into the methods used by mountain historians in unraveling tangled bits of mountain history shows, however, that this statement is inaccurate because it is too narrow, and that the reports of eye-witnesses of an ascent and also the statements and observations of later climbers may be as strong proof as a stoneman. As far as I can see now, the proofs about a mountain ascent fall into three main classes: traces or relics left on the mountain by the climbers: statements by eye-witnesses of the ascent: proofs furnished by the observations and statements of other climbers.

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[16] *The Alpine Journal*, 1899, Vol. XIX, pages 536–543, 559, 560.

[17] *The North Pole and Bradley Land*, 1913, pages 30, 31.

Traces or relics of an ascent consist of something erected or left on the mountain by the climbers. Usually these traces take the form of a stoneman also called a cairn, or of a bottle or empty tin containing the visiting cards of the climbers. But all sorts of odds and ends have been left on mountain tops, and when anything of the kind is found on a mountain top, it is, of course, absolute proof of a previous ascent.

A stoneman is, perhaps, the most lasting visible memorial of an ascent. But a stoneman cannot always be erected. A stoneman cannot be raised on a snow peak. Neither can a stoneman always be raised on a rock peak: not for instance on a peak where there are nothing but big rocks near the top, since the fragments of rock a stoneman is built of must be manageable by one or two men without mechanical appliances.

How well a stoneman may last, I have learned from ocular proof. In 1881, I spent a few days at the Hotel Aak, Romsdal, Norway. Back of this rises the cone-shaped Romsdalhorn. It certainly looked inaccessible from its repellent smoothness, its sides rising up almost like a gigantic bottle. I asked the natives about its ascent, and they shook their heads and said it was impossible. But, I urged, someone has surely been up, for there is a pile of stones on top which must be a stoneman. The answer was that it was only a little knob of

rock on top of the mountain. The same summer Mr. Carl Hall, a Dane, after six attempts, did climb the Romsdalhorn, and did find on top a cairn which, it is now believed, was raised by an enterprising Norwegian blacksmith[18] who climbed the mountain approximately about the year 1828. Here is a well authenticated case of a stoneman standing for several decades against violent windstorms and eventually proving that a forgotten or disbelieved ascent had genuinely been made.

That, on the contrary, stonemen vanish sometimes utterly in a few years and therefore are not certain proof of an ascent is shown in the early ascents of the Finsteraarhorn. The guides Jakob Leuthold and Johann Währen, built in 1829 on the Finsteraarhorn a stoneman 7 feet high and planted in it a pole as thick as a man's arm and 7 feet long. In 1842, the guides Johann Jaun and Heinrich Lorentz also reached the top and found no traces of any previous ascent except three little iron rods, some rolled up thread and a needle fast rusted therein.[19] Here, therefore, is a case where some infinitesimal trifles, doubtless accidentally dropt on the ground, perhaps in 1812 but possibly in 1829, outlasted a laboriously erected and apparently solid rock memorial.

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[18] *The Alpine Journal*, 1883, Vol. XI, page 144.

[19] *The Alpine Journal*, 1913, Vol. XXVII, pages 296, 298.

It is certainly not surprising that often stonemen and relics on mountain tops are obliterated. A stoneman on a real top is entirely exposed to the weather and may gradually be blown away by the furious hurricanes which sometimes rage over high peaks. Bottles and such objects may be sheltered in some rock cracks but even they may disappear. I am certain that on two rock peaks, the Nadelhorn, 14,220 feet, which had been climbed once, and the Portienhorn, 12,010 feet, which I think had been climbed twice, before I ascended them, there was, when I reached their summits, no vestige of a stoneman nor any traces of previous ascents. But in both cases the tops were exposed to any storm and any relics left by other climbers were surely swept away. While the presence of stonemen and relics, therefore, may be looked on as positive evidence of an ascent, their absence, on the contrary, cannot be considered as absolute negative evidence. They may have existed and have been destroyed.

As good proof of an ascent as there is, is when the climbers are actually seen on a mountain thru a telescope. This happens, on many a summer day, when the ascents of Mont Blanc are watched thru the telescopes at Chamonix. And most fortunately this happened with the first ascent of Mont Blanc. Another famous first ascent in which the climbers were watched on top was the

first ascent of the Matterhorn, but it is perhaps more rarely noticed that Croz, Hudson, Hadow and Douglas were actually seen to fall from near the summit of the Matterhorn to the Matterhorngletscher by a sharp eyed lad at Zermatt.[20]

In regard to the accuracy of observers of an ascent thru a telescope and the value of their testimony, however, the following personal experience may be of some interest. While staying at the Hotel Couttet in Chamonix, a number of men and women collected at the telescope in the garden one day to watch a party who were reported to be ascending Mont Blanc. After eight or ten other persons had had a look, never moving the telescope and apparently with satisfaction, my turn came. I then found that the telescope was pointed at the uppermost crevasses and séracs of the Glacier des Bossons where no human foot ever trod. By turning the telescope to a point some five thousand feet higher, near the Calotte, the climbers appeared wending their steps upwards. But I have always wondered what those sharp-eyed tourists who had looked before me thought of the resemblance of crevasses and séracs to human beings. And it seems to me, that this experience shows that the testimony of eye-witnesses of an ascent is not absolute proof: it must also be taken into account who these witnesses are.

[20] Edward Whymper: *Scrambles Amongst the Alps*, Chap. XXII.

The third class of proofs in regard to mountain ascents are those furnished by the observations and statements of other climbers. If an ascent is disputed and there are no relics of the climbers found on the mountain nor any eye-witnesses of the ascent, the only way left to solve the problem is to compare this ascent with other ascents. And to judge mountain ascents by the comparative method, requires more than a mere climber: it requires a mountain historian. A man might be a capital climber and an excellent mountaineer and yet know nothing of the history of mountaineering. But to compare ascents, a man must know a great deal about the history of many peaks: he must have a good working knowledge of what has been done and what can be done on a mountain side: he must know enough about ascents in general to be able to draw comparisons. And this knowledge must be obtained, sitting in an easy chair, from an extensive perusal of the printed pages narrating the exploits of other climbers.

But a man might know all about the history of mountaineering, yet never have been on a mountain side. And he would lack a certain knowledge very important to a mountain critic. There are thousands of details, about guides, and equipment, and rocks, and ice, and weather, which only first hand experience can teach a man. And so far, it is men who have studied long and carefully the

ascents of others and who have had also the training of actual practice who have been able to turn the light of comparison on to dark recesses in the story of the mountains. And when comparison is applied from a full knowledge to mountaineering, it may be depended on, as in most, perhaps all, other subjects, to yield fruitful results.

The comparative method of judging mountain ascents is of special value in examining into first ascents, or into first ascents by a new route. First ascents and new routes may be checked off and compared in two lines: first, with the ascents of other mountains: second, with later ascents of the same mountain. One can compare the statements of the makers of a first ascent or a new route with the accumulated testimony of tens of thousands of other climbers in regard to the equipment, the weights carried, the distances traversed, the times given, the vertical heights climbed, the steepness of slopes, the kind of rocks, the ice or snow encountered, the effects of rarefied air, etc. What has been done and what can be done is perfectly well known. From the statements of the first party who claims the ascent of a mountain, it is well within the powers of a person trained in mountain lore to say whether the ascent was possible or impossible: he could not say positively that the ascent had been made, but he could say definitely whether it might have been made.

When, however, a mountain is ascended a second time by the same route, the statements of the first party can be verified or discredited almost to a certainty. Accounts of ascents never tally exactly: no two sets of men have quite the same experiences: no two men observe quite the same things nor describe them alike: there are always some variations. But suppose, for instance, that the first party balances along an arète for a thousand feet, then takes to a couloir east of the arète for another thousand feet, then makes a bad traverse for three hundred feet, and then pulls up steep rocks for another thousand feet: if now the second party reports doing these same things because they also found it was the correct route, then there is definite proof of the ascent of the first party. That sort of proofs about a steep mountain side cannot be invented from below. You cannot tell before hand that an arète is negotiable, that one can cut up a steep couloir, whether steep rocks can be climbed or not. For years the Zermatt face of the Matterhorn and the La Bérarde face of the Meije were left untouched by the best guides because they looked impossible, and yet they were the easiest sides of the two mountains. Climbers do not invent and lay down ahead with certainty definite routes up difficult mountains: they try and often are defeated. But when a climber does follow a route and another party comes along and

finds that route a good one, the first climber is verified. The verification of a first ascent by a second party implies, however, of course, that the second party really made the ascent. A climber on a first ascent cannot copy anyone else, but a climber on a second ascent can of course copy his predecessor's account. But if the second party really made the ascent, and found the great lines of the ascent similar to that of the first party, the first ascent is proved.

Second and later ascents of a mountain are, in the nature of things, a great deal harder to prove than first ascents or first ascents by a new route. A great many, indeed the majority of, mountain ascents certainly cannot be proved by the comparative method. This applies to the ascents of well-known mountains by ordinary routes. For when a mountain has been climbed even only once, and its ascent correctly described at least once, it could be climbed a second time in imagination only and a romantic description of this imaginary ascent indited which it would be hard to tell from a genuine one. A man might start up a well-known mountain, having first of all read up carefully about it, never go to the top, and on coming down describe the ascent so correctly as to ensure recognition of his success.

A second or third ascent, however, is still, to some extent, verifiable comparatively. The second

or third climber of a mountain is likely to give some details which, to an expert mountain historian, carry conviction. Among such proofs, for instance, may be mentioned photographs. Photographs, however, cannot always be called absolute proof, for they can be manipulated and retouched to almost any extent. But genuine untouched photographs nevertheless sometimes might afford almost positive proof of a second or third ascent.

II.

THE DEADLY PARALLEL.

The North American Continent reaches its greatest altitude in south central Alaska in the shape of a gigantic mountain. The height of this mountain, not positively determined as yet, is almost surely between 20,300 feet and 20,500 feet, while the snow line at its base is in the neighborhood of 2,000 feet, and therefore, unless there is some unknown peak in Antarctica rising to above 19,000 feet, the great Alaska summit is vertically the tallest snow carrier in the world. That there is a native name for this mountain was probably unknown to the first white invaders of Alaska who became aware of the existence of the mountain. The Russians called it Bulshaia Gora, or Big Mountain, and an American mining prospector, Mr. W. A. Dickey, renamed it Mount McKinley. As acquaintance ripened, however, it was discovered that there was an appropriate, descriptive native name for the mountain, Traleyka, or Tennally, or Denali, the Great One.[21] Whether the native name will ever be restored to it is problematical, but let us hope that, either as Traleyka or Tennally, it may be in the fullness of time.

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[21] Alfred H. Brooks: *The Mount McKinley Region, Alaska:* United States Geological Survey, Paper 70, Washington, 1911.

Mount McKinley is far away from the haunts of civilized man, and thus almost escaped notice until within the last two decades. During the last five years, however, it was brought into sudden prominence, and, curiously enough, not because of its own grandeur, but on account of an entirely different matter, the discovery of the North Pole, which, owing to much foolish talk, has become tangled up with the first ascent of Mount McKinley. But unrelated as the first ascent of Mount McKinley is to the discovery of the North Pole, in itself it is an interesting if subordinate subject in the history of geographical discovery, and since doubts have been cast upon it, it becomes a motive for mountain historians and some of them should investigate it. And it should appeal especially to American geographers and mountain climbers, because Mount McKinley is the highest point of the North American Continent, and the truth must be known about its first ascent.

The history of the Mount McKinley region has been carefully written by Mr. Alfred H. Brooks,[22] to whose monumental work the reader can refer for information about explorations round Mount McKinley. Several unsuccessful attempts to ascend the mountain have been made. Judge James Wick-

[22] Alfred H. Brooks: *The Mount McKinley Region, Alaska:* United States Geological Survey, Professional Paper 70, Washington, 1911.

ersham, in 1903, was the first man who tried to climb the mountain, and he attacked it from the northwest and reached an altitude of 10,000 feet.[23] Two attempts were made in 1903 by Dr. Frederick A. Cook and Mr. Ralph L. Shainwald; the first from the southwest, the second from the west, when an altitude of 11,000 feet was reached.[24] In 1910 Messrs. Belmore Browne and Herschel C. Parker worked up the Ruth Glacier nearly to the eastern base of Mount McKinley.[25] In 1911, Mr. R. C. Bates tried to ascend by the northeast ridge, and ascended to 11,000 feet.[26]

Mount McKinley rises into a double summit, a Southern and a Northern summit, of which the Southern summit is the highest. Three parties claim to have reached the top of the Southern peak, and one claims to have ascended the Northern summit. The first of these claimants is Dr. Frederick A. Cook, who says he ascended the Southern peak of Mount McKinley in 1906, and who published first an article, "The Conquest of Mount McKinley," in *Harper's Monthly*

[23] Alfred H. Brooks: *The Mount McKinley Region*, pages 29, 30.

[24] Frederick A. Cook, M. D.: *To the Top of the Continent*, 48–70.

[25] Belmore Browne: *The Conquest of Mount McKinley*, pages 74–180.

[26] Dr. Frederick A. Cook: *My Attainment of the Pole*, Press Edition, Mitchell Kennerley, MCMXIII, page 534.

Magazine, May, 1907, pages 821-837, and then a book, partly an enlarged version of his article, *To The Top of The Continent,* 1908, narrating his ascent. The second party, known as the Tom Lloyd party, was composed of several Alaska miners, who state they went up the Southern and Northern peaks in 1910, and of whose exploit a long stenographed account was published in *The New York Times,* 5 June, 1910. The third expedition was that of Messrs. Belmore Browne and Herschel C. Parker in 1912, who state they almost reached the top of the Southern peak, and who published an account of their adventures in several magazine articles and in a book, *The Conquest of Mount McKinley,* 1913. The fourth claimant is the Reverend Dr. Hudson Stuck, Archdeacon of the Yukon, who says he reached the top of the Southern peak in 1913 and who published an account of his travels, "The Ascent of Denali," in *Scribner's Magazine,* November, 1913, pages 531-552, and also in a book, *The Ascent of Denali,* 1914.

In examining into this already somewhat voluminous literature about Mount McKinley, it will soon become apparent that the comparative method must be resorted to in any attempt to verify the claims advanced by the various climbers of the mountain. There are no eye-witnesses from below of any of the ascents. Owing to the snowy conditions reported by the second, third and fourth ex-

peditions, the only relic left by any of the climbers of the least value as proof is the pole erected by Lloyd on the North Peak. A mountain historian in this case, therefore, must turn to comparison to unravel the history of the first ascent of Mount McKinley, and for purposes of comparison a short resumé of each account, consisting mostly of quotations, is now published in four parallel columns. The figures at the left hand side of the columns refer to corresponding statements or observations in the four narratives, and are used again in the comparisons of these statements or observations in Chapter IV.

COOK.

1. Dr. Frederick A. Cook, according to his own statements (*To the Top of the Continent*, 1908), in 1906 came up from Cook Inlet and ascended Mount McKinley with one companion, Edward Barrille.

On 8 September they started from a camp, at an altitude of about 1000 feet, on the Tokositna River, just above its junction with the Chulitna River, and pushed up one of the great glaciers, which Cook named Ruth Glacier, flowing towards the southeast from Mount McKinley. In three days they traveled about thirty-five miles and the third night camped on the glacier at about 8000 feet. (*To the Top*, pages 188-202.)

From this point, which must be northeast of the summit of Mount McKinley, Cook and Barrille climbed up the cliffs of the eastern side of the northern arète. This ascent, described in a chapter entitled "To the North East Ridge," was dangerous from avalanches. But "rising from ridge to ridge and from cornice to cornice" they finally reached the divide between the Yukon and the Susitna. (*To the Top*, pages 203-207.)

LLOYD.

1. Messrs. Thomas Lloyd, Billy Taylor, Pete Anderson, and Charles McGonagell, according to Mr. Lloyd's statements, ascended Mount McKinley in the spring of the year 1910. Mr. Lloyd's story was taken down stenographically and written by Mr. W. F. Thompson, Editor *Fairbanks* (Alaska) *News Miner*, and published under the title "First Account of Conquering Mt. McKinley" in *The New York Times*, Sunday, 5 June, 1910.

The Lloyd party started 11 February, 1910, from Fairbanks, and worked up to the mountain from the north and northwest. Between 4 March and 14 March, they transported by dog teams their supplies up a glacier which, on account of its steep side rock walls, they called Wall Street Glacier. "The route was practically east and west until we turned close to McKinley. The trail was raising all the time. Then the trail turned to the south—to the left of the ridge that we climbed on. Arrived at the Pothole Camp * * * Had no aneroid to determine elevation, but estimate it to be about 9,000 or 10,000 feet." "We had one magazine in the

BROWNE.

1. Messrs. Belmore Browne and Herschel C. Parker, according to their own statements (*The Conquest of Mount McKinley*, 1913), in 1912 came up from Cook Inlet and, after crossing the Alaska Range to the northeast of Mount McKinley, turned southwest for a short distance.

They then ascended, from the west, to the Lower Northern McKinley Glacier, which Browne calls the Muldrow Glacier, thru a gap which he calls Glacier Pass. Apparently they discovered this route for themselves, but it is probably the same as that of the Lloyd party. (*The Conquest*, pages 281–295.)

They then pushed up the Lower Northern McKinley Glacier, relaying tremendous loads with their dogs, up to about 11,000 feet, where they formed a "Base Camp," from which on 5 June they began their final attack on Mount McKinley. (*The Conquest*, pages 296–322.)

STUCK.

1. The Rev. Dr. Hudson Stuck, Archdeacon of the Yukon, according to his own statements (*The Ascent of Denali*, 1914), ascended Mount McKinley in 1913. His companions were Mr. Harry P. Karstens, of Fairbanks; Mr. Robert G. Tatum, of Tennessee; and a half-breed native boy, Walter Harper. The party started about the middle of March from Fairbanks and traveled across the Kantishna country to the northwestern slopes of Mount McKinley. They reached the Lower Northern McKinley Glacier, which Stuck calls the Muldrow Glacier, apparently by precisely the same route as the Lloyd and Browne parties (*The Ascent*, pages 17, 18, 23), ascending to the glacier thru a gap or breach in the rocky ridge west of the glacier, which gap Stuck calls the McPhee Pass, a name already used by Lloyd. A wild rabbit, who was certainly a good climber, followed the Stuck party up the glacier to an elevation of 10,000 feet. (*The Ascent*, page 50). Stuck's party then ascended the Lower McKinley Glacier, bringing forward enormous loads with the help of dogs. (*The Ascent*, pages 25–34.)

COOK.	LLOYD.
	party, all the reading matter we had * * * it had pictures in it of Morgan and some of them guys, but I can't remember the name." On 17 March, Lloyd says: "We are setting stakes across the glacier to mark the trail to the saddle." "The trail is eight miles long." "We would push on each day as far as we could and drop back at night to the Pothole Camp until we had finally established our last Camp at what we all judged to be the 15,000 foot level."
2. Cook and Barrille each carried between 40 and 45 pounds of baggage at the start, of which 21 pounds was pemmican and biscuit. (*To the Top*, pages 192–195.)	2. Lloyd says: "We used no ropes in climbing. We took our chances individually, traveled over the glaciers on snowshoes equipped with roughlocks * * * We also used ice creepers in climbing, and snowshoes only over the lower glaciers."
3. On the divide Cook camped on a little snow field, where the snow was hard enough to cut blocks with which to build a snow house, at a height of about 12,000 feet. (*To the Top*, pages 207-211.)	3. 18 March: "This morning took the blue tent up to our last camp (at the Saddle) and approximate the elevation at not less than 15,000 feet. We drove a tunnel into the snow on the left hand ridge to make a place to pitch the tent in. The tunnel seems

BROWNE.	STUCK.
2. Browne's party traveled "heavy": "Our outfit complete weighed in the neighborhood of six hundred pounds." (*The Conquest*, page 297.)	2. Stuck's party was handicapped thruout by their loads. On the Upper McKinley Glacier they moved from 250 to 300 pounds each time they advanced camp, and all told climbed at least 60,000 feet. (*The Ascent*, page 83.)
3. Before 19 June they reached the Northeast ridge, and camped on a little col which Browne calls Col Camp, at about 11,800 feet, whence they started on the ascent of the Northeast ridge. (*The Conquest*, page 327.)	3. Early in May they reached the base of the Northeast ridge, at an altitude of about 11,500 feet. Here they camped in a spot of which Stuck says: "We established ourselves in the cirque at the head of the Muldrow Glacier, at an elevation of about eleven

COOK.

4. Cook, between 12,000 feet and 14,000 feet, followed the edge of the Northeast arète. "Along the east among the cliffs that had seemed impossible from below there were

LLOYD.

now to be built of solid ice. Then we dropped back to the Pothole Camp."

20 March: "It cleared up a little this morning. Took five of the dogs with a jag of freight up to a little below the 15,000 foot level, with coal oil stove and a little outfit, preparatory to the final camp moving."

22 March: "It snowed all night, Charley and Pete and myself started with bedding and a few things for the glacier, or the ridge between the two mountain peaks of McKinley, where we had drove the tunnel in the snow and where the blue tent is * * * Everything is comfortable in our Tunnel Camp."

4. 26 March: "We are going to make our final effort to ascend the summit within the next few days. We have cut steps and put stakes along up to the 19,000 foot elevation."

BROWNE.

STUCK.

thousand five hundred feet." (*The Ascent*, page 34.)

Stuck says that to the west of this cirque where they camped is a ridge running to the North Peak: on the east a ridge running to the South Peak: between these, about 4,000 feet above the cirque, is an upper glacier which discharges in a tremendous ice fall: the best route, perhaps the only one, is along the ridge to the east running to the South Peak, which is the Northeast ridge of Mount McKinley. (*The Ascent*, pages 38–40.)

Of the name, Northeast Ridge, Stuck says: "This ridge, then called by Parker and Browne the Northeast Ridge." (*The Ascent*, page 40.) "The designation 'Northeast,' which the Parker–Browne party put upon the ridge that affords passage from the lower glacier to the upper." (*The Ascent*, page 183.)

4. Browne, between 11,800 feet and 14,400 feet, followed the Northeast arète. "The ridge was so sharp that I had to chop off the crest * * * On the left the ridge dropped

4. Stuck adopted the Northeast ridge because it is the best route. He says that it "was a confused, jagged mass of rocks and ice * * *. The low col in which the

COOK.

several promising lines of attack along narrow overhanging glaciers and over steep ice-sheeted ridges. Every possible route however from this side was seen as the eye followed it to the summit to be crossed somewhere by avalanche tracks. Along the west there was a similar danger from the sweep of the ceaseless downpouring rock and snow. Our only chance, and that seemed a hopeless one, was along the cornice of the north-eastern arète upon which we were camped. For some distance there was a smooth line of crusted snow with a sheer drop of about 4000 feet to either side." "With eternity but an easy step below every moment of this climb we went from hanging glacier to snow slopes, from blue grottoes to pink pinnacles, from security to insecurity, with the thundering rush of avalanches on both sides." "The safest place was along the snow arète." (*To the Top*, pages 212–216.)

LLOYD.

5. At about 14,000 feet, "the slope upon which we had cut steps and seats in the ice was nearly 60°, but

BROWNE.

away at a dizzy angle for 5,000 feet * * * on the right it fell away almost straight for 2,000 feet: you felt as if you were flying." (*The Conquest*, page 328.)

Browne speaks of the knife-edged ridge up to about 14,400 feet. "But the work was so difficult that after seven hours of continuous work with La Voy chopping half the time *we rose only 800 feet.*" (*The Conquest*, page 330.)

STUCK.

Parker-Browne party made their camp no longer existed. In its place was a great gap from which the ridge rose again by a sheer ice gable." (*Scribner's Magazine*, 1913, page 538.) It took his party three weeks to hew a staircase three miles long in the Northeast ridge, and they were gone thirty-one days from the camp at the head of the Lower Northern McKinley Glacier until their return. (*The Ascent*, pages 41–43.)

5. "Back from a very hard trip. We climbed to 13,200 feet through the softest of snow over as sensational a

5. Towards the top of the Northeast ridge, Stuck found that tho less broken than farther down, yet that it was ter-

COOK.	LLOYD.
the ice was secure, the snow firm and the danger from avalanches small." Here Cook dug a hole in the ice and spent the night. (*To the Top*, pages 217-218.)	
6. On leaving the 14,000 foot camp Cook says: "As we dragged ourselves out of this icy ditch of terrors we were able to see that we had passed the barriers to the ascent. The slopes above were easy, safe and connected, but the bigness of the mountain was more and more apparent as we rose above the clouds." (*To the Top*, page 218.) Somewheres round 15,000 feet: "Soon after noon, we swung from the arète easterly to the glacier." (*To the Top*, page 219.) Cook gives a photograph (*To the Top*, page 226), taken at about 15,400 feet, of an arète composed of great pointed rock slabs.	
7. Cook camped at about 16,300 feet "in a small amphi-	

BROWNE.	STUCK.
ridge as I have ever been on. Some of the slopes that we *traversed* were 60° or more, for I measured one that overhung a 2000-foot drop off that measured 50° on the clinometer, and there were many that I could not measure because we could not stay on them longer than was necessary." (*The Conquest*, page 327.)	ribly steep. (*The Ascent*, pages 63, 70.)
6. "On the following day we advanced our camp to the shelter of the rocks, where I made the following entry in my diary: '15,000 foot Camp.' We have packed up heavy loads from our ridge camp in a little more than three hours as the steps high up were not badly drifted. It was frightfully hard work and glad we are to be camped in the lee of some great granite slabs * * * We are on the very edge of the Big Basin that divides the two summits of Mount McKinley." (*The Conquest*, page 332.)	6. At about 15,000 feet, like the preceding climbers, Cook, Lloyd and Browne, Stuck got on to the Upper Glacier. "Long as it was, the slope was ended at last, and we came straight to the great upstanding granite slabs amongst which is the natural camping-place in the pass that gives access to the Grand Basin." (*The Ascent*, page 72.)
7. Browne camped at about 15,800 feet and 16,615	7. Stuck's party camped at 16,000 feet; on 3 June at

COOK.

theatre where the snow was hard enough to cut blocks for a snow house." (*To the Top*, page 221.)

8. Ascending from this camp, Cook says: "During the frequent breathing spells we examined the upper reaches of the mountain. We had seen the summit from various sides, but we were not prepared for the surprise of the great spread of surface. From below the apex appears like a single peak, with gradual slopes. From the northern foothills we had previously discovered two distinct peaks. But now, from the upper slopes, we saw that there were several miniature ranges running up to two main peaks about two miles apart. To the west a ridge with a saddle, to the east a similar ridge, with one main peak to the southeast. This peak was the highest point, and to it we aimed to take our weary

LLOYD.

8. 2 April: "We left Tunnel Camp at daylight to make the high ridge toward the coast summit, along which we intended to proceed to the summit. (Note. There are two summits to Mount McKinley, apparently of equal height, and connected by a 'saddle.' We climbed them both.) * * * Pete and Charley had been on the Saddle previously, cutting steps and staking the trail and preparing the way, so that the flagpole might be dragged to the summit and erected there."

BROWNE.

feet on the Upper McKinley Glacier on little snow fields where the cold was terrible. (*The Conquest*, pages 333–337.)

8. Browne's photographs (*The Conquest*, page 334) of his camps at 15,800 feet and 16,615 show the great spread of surface. Of the view from 16,615 feet he says: "On the north the great blue ice slopes led up at an almost unclimbable pitch between the granite buttresses of the Northern Peak. On the south frozen snow-fields swept gently to the rock-dotted sky-line of the Central North-East Ridge which led in an easy grade to the final or southern summit of the great mountain." (*The Conquest*, page 336.)

STUCK.

about 16,500 feet (*The Ascent*, page 86); on 5 June at about 17,500 feet (*The Ascent*, page 88); on 6 June at about 18,000 feet (*The Ascent*, page 89); on 7 June they climbed to the top and back to last camp. (*The Ascent*, pages 92–116.) All these camps were on the snowfields of the Upper McKinley Glacier.

COOK.

spirits." (*To the Top*, pages 225, 226.)

9. Of the climb from 16,300 feet to 18,400 feet Cook says: "Compared to our lower climbs the slope here was ridiculously easy, but the work was hard, out of all proportion to the seeming difficulties." (*To the Top*, page 226.)

Of the climb from 18,400 feet to the summit Cook records: "Our route was over a feathery snow field which cushioned the gap between rows of granite pinnacles." (*To the Top*, page 230.)

10. Between 16,300 feet and 18,400 feet Cook records: "After slowly making a hundred steps we puffed like race horses on the home stretch, and were forced to stop and gasp for breath; another hundred steps and another gasp and so on * * * Our legs were of wood and our feet of stone." (*To the Top*, page 226.)

Beyond 18,400 feet Cook says: "An advance of twenty steps so fagged us that we were forced to lean over on

LLOYD.

10. Lloyd states: "The altitude affected us all differently. We all had to breathe through our opened mouth. You couldn't get enough air through your nostrils: our nostrils would not serve anyone of us for wind-getting."

BROWNE.	STUCK.
9. At a little less than 19,000 feet Browne says of the summit: "It rose as innocently as a tilted snow-covered tennis-court and as we looked it over we grinned with relief—we *knew* the peak was ours." (*The Conquest*, page 340.)	9. Stuck found no mountaineering difficulties on the Upper McKinley Glacier: it was merely a long snow grind. Stuck says: "With the exception of this ridge, Denali is not a mountain that presents special mountaineering difficulties of a technical kind. Its difficulties lie in its remoteness, its size, the great distances of snow and ice its climbing must include the passage of, the burdens that must be carried over those distances." (*The Ascent*, page 79.)
10. Of the climbing between 16,615 feet and 18,500 feet Browne says: "We moved very quietly and steadily * * * At regular half-hour intervals La Voy and I exchanged places * * * Between changes both Professor Parker and I checked off our rise in altitude and to our surprise we found that, although we thought we were making fairly good time, we were in reality climbing only 400 feet an hour." (*The Conquest*, page 338.)	10. Near the great granite rocks at about 15,000 feet Stuck says that: "Higher than any point in the United States * * * it is yet not so high as to induce the acute breathlessness from which the writer suffered, later, upon any exertion." (*The Ascent*, page 76.) Stuck became more and more affected by the altitudes and at the top "had almost to be hauled up the last few feet, and fell unconscious for a moment upon the floor of

COOK.

our ice axes to puff and ease the heart: another twenty steps and another rest, and so on in a life-racking series of final effort. (*To the Top*, page 230.) * * * It was an awful task, however, to pick ourselves up out of the deep snow and set the unwilling muscles to work pulling up our legs of stone." (*To the Top*, page 231.)

11. At his 18,400 foot camp, Cook records: "The circulation was so depressed that it was impossible to dispel the sense of chilliness. Increased clothing or bed-covers did not seem to make much difference. The best thing to dispel the shivers was hot tea. * * * Though the temperature was only 16° below zero, in its effects it was colder than 60 below at sea level." (*To the Top*, pages 226, 227.)

12. On leaving his camp at 18,400 feet, Cook says: "The sun soon rose far above the

LLOYD.

BROWNE.

Of the climb beyond 18,400 feet Browne records: "As we advanced up the ridge we noticed a shortness of breath." (*The Conquest*, page 340.)

STUCK.

the little snow basin that occupies the top of the mountain." (*The Ascent*, page 99.)

11. Browne's party suffered severely from the c o l d. They slept in a tent, and not in a snowhouse, and therefore probably felt the cold more severely. Browne says: "The cold too was intense. The leaves of my diary were so cold that I could not write without gloves. * * * The temperature inside of our tent at 7.30 p. m. on the 26th of June was 5° below zero, and three hours later it was 19° below zero * * * I can say in all honesty that *I did not have a single night's normal sleep above 15,000 feet on account of the cold.*" (*The Conquest*, pages 334, 335.)

11. Of the cold Stuck records: "Cold it was, at times even in the sunshine, with a 'nipping and an eager air,' but when the wind ceased it would grow intensely hot. * * * At night it was always cold, 10° below zero being the highest minimum during our stay in the Grand Basin, and 21° below zero the lowest. But we always slept warm." (*The Ascent*, pages 81, 82.)

COOK.	LLOYD.
green lowland beyond Mount Hayes and moved toward the ice-blink caused by the extensive glacial sheets north of the St. Elias group." (*To the Top*, page 229.)	
13. "Just below the summit we dropped over an icy shelf on the verge of collapse. After a few moments we gathered breath and courage and then for the last stage the life line tightened with a nervous pull. We edged up a steep snowy ridge and over the heaven-scraped granite to the top. AT LAST! The soul-stirring task was crowned with victory: the top of the continent was under our feet." (*To the Top*, page 231.)	13. 2 April: "From that summit it looked as though the northern summit was equally as high as it * * * It took us (to reach the south summit) from daylight until about 3 p. m., and we covered six or seven miles to make that distance of a thousand feet up."

BROWNE.

13. From their 16,615 feet camp, Messrs. Browne and Parker made two attempts to reach the summit of Mount McKinley. The dates were probably 29 June and 1 July, 1912, but Mr. Browne's book is not very definite. (*The Conquest*, pages 337–350.)

Nevertheless they did not reach the actual summit. On both their attempts, at a little beyond 19,000 feet, they were struck by blizzards, and were defeated by these and not by the difficulties of the mountain. They were very close indeed to the actual top and "La Voy said we had done enough in getting on top of the mountain, and that we had climbed the peak because it was only a walk of a few minutes from our last steps to the final dome. This was true, but unfortunately there is a technicality in mountaineering that draws a distinction between a mountain top and *the* top of a mountain—we had

STUCK.

13. The top of Mount McKinley, Stuck describes as follows: "This, then, is the actual summit, a little crater-like snow basin, sixty or sixty-five feet long and twenty to twenty-five feet wide, with a haycock of snow at either end—the south one a little higher than the north. On the southwest this little basin is much corniced, and the whole thing looked as though every severe storm might somewhat change its shape." (*The Ascent*, page 99.)

COOK.	LLOYD.
14. Cook's photograph of the summit of Mount McKinley shows plenty of bare rock.	14. 2 April: "When I reached the coast summit I couldn't find any rocks or any formation in which the flagpole could be placed permanently." Lloyd also says: "If Dr. Cook had made the summit of Mount McKinley as he says he did he could not have escaped seeing samples of the rock on that summit and near it. Had he seen that rock he would have mentioned the fact, for it is rock that would command the attention of any mountaineer, especially when encountered in such a spot. I have sent samples of the rock to Smithsonian Institution for classification."
15. "A record of our conquest was, with a small flag, pressed into a metallic tube and left in a protected nook a short distance below the summit." (*To the Top*, page 233.)	15. 3 April: "This morning before daylight we climbed to the saddle between McKinley's two peaks, dragging the flagpole with us. * * * Once there we proceeded to cross the Glacier between the two summits, to the North summit, where the rocks were * * * Pete Anderson kept the time, as my watch had

BROWNE.

not stood on *the top*—that was the only difference." (*The Conquest*, page 346.)

STUCK.

14. Stuck also says of the top: "There is no rock of any kind on the South (the higher) Peak above nineteen thousand feet. The last one thousand five hundred feet of the mountain is all permanent snow and ice." (*The Ascent*, page 165).

15. Browne records that somewheres round 19,000 feet "In a crevice on the highest rock of the main ridge we left our minimum thermometer; it, a few cans of frozen pemmican, and our faithful old shovel, are the only traces of our struggle on the "Big Mountain." (*The Conquest*, pages 349, 350.)

15. Stuck tells of sighting the flagstaff set up by the Lloyd party, in the following words: "All at once Walter cried out 'I see the flagstaff!' eagerly pointing to the rocky peak nearest to the summit, for the summit itself is covered with snow. Karstens, looking where he pointed, saw it also, and, whipping out the

COOK.

LLOYD.

gone on the bum * * * When we reached the northern summit we found plenty of rocks there, and we erected a monument that will endure as long as the top of the mountain does * * * Into it we stuck that flagpole * * The flag was raised at 3.25 p. m. April 3, 1910 * * *"

16. Of the view at the top Cook says: "As the eye ran down we saw the upper clouds drawn out in long strings, and still further down the big cumulus forms, and through the gap far below, seemingly in the interior of the earth, bits of rugged landscape. * * * Various trains of morning clouds screened the lowlands

16. "When we were on the summits of Mount McKinley, on both days, it was bright and clear at the top, but fogs and clouds obscured the view below us and we took no photographs of the surrounding country from the summits."

BROWNE.

STUCK.

field glasses, one by one we all looked and all saw it distinctly, standing out against the sky. Through the glasses it rose sturdy and strong, one side covered with crusted snow; and we were greatly rejoiced that we could carry down confirmation of the matter." (*Scribner's Magazine*, 1913, page 546.)

In descending from the summit, Stuck made a detour to seek Parker's thermometer, but did not find it. (*The Ascent*, page 106.) Stuck himself left some of his surplus baggage at his 18,000 foot camp on the Upper McKinley Glacier (*The Ascent*, page 117); and also cached a thermometer and a tin can near some rocks in the neighborhood of 15,000 feet. (*The Ascent*, page 119.)

16. Referring to Mount Foraker, Stuck says: "We were all agreed that no one who had ever stood on the top of Denali in clear weather could fail to mention the sudden splendid sight of this great mountain." (*The Ascent*, pages 165, 166.)

COOK.

and entwined the lesser peaks. We could see narrow silvery bands marking the course of the Yukon and the Tanana, while to the south, looking over nearby clouds, we had an unobstructed view." (*To the Top*, page 232.)

17. Of the sky on the 16th of September, when victory crowned Cook's efforts, Cook records observations sufficiently impressive to have caused him to entitle Chapter XIV: "To The Top—The World in White and the Heavens in Black." At 18,400 feet he says: "As the darkness merged into twilight the sky brightened, but as the sun rose the sky darkened and the cold increased." (*To the Top*, page 229.) At the top, Cook says: "It was ten o'clock in the morning, the sky was as black as that of midnight. At our feet the snow glittered with a ghastly light." (*To the Top*, page 232.) And further: "Most impressive was the curious low dark sky, the dazzling brightness of the frosted granite blocks, the neutral gray-blue of space, the frosty dark blue of the shadows." (*To the Top*, page

LLOYD.

BROWNE. STUCK.

17. At the top Stuck records: "Above us the sky took a blue so deep that none of us had ever gazed upon a midday sky like it before. It was a deep, rich, lustrous, transparent blue, as dark as a Prussian blue, but intensely blue; a hue so strange, so increasingly impressive, that to one at least it 'seemed like special news of God,' as a new poet sings. We first noticed the darkening tint of the sky in the Grand Basin, and it deepened as we rose. Tyndall observed and discussed this phenomenon in the Alps, but it seems scarcely to have been mentioned since." (*The Ascent*, pages 103, 104.)

COOK.	LLOYD.
233.) Cook's photograph of the top also shows the remarkably dark sky, almost as dark as the rocks.	
18. Of the return journey, Cook says: "The descent was less difficult, but it took us four days to tumble down to our base camp." (*To the Top*, page 233.)	18. Lloyd says of the descent: "Counting that we left the summit in the afternoon of the 3rd, stopping at the Tunnel Camp that night and starting on the morning of the 4th down the trail, reaching Willow Camp that night, you will see that, in less than a day and a half we covered the distance going down which it had taken us over a month to cover going up. We traveled light coming down, having no grub and not much of a camp outfit, and we made good time over our blazed and secured trail." "In coming down the glacier on the return and final descent, Bill Taylor's foot slipped. He shot down the glacier with the speed of an express train * * * If his hook had failed to catch, there would not have been a grease spot left of him when he reached the end of the precipice."

BROWNE.	STUCK.
18. Browne's party took several days to descend Mount McKinley, but, as in their ascent, they appear to have been hampered by heavy loads. Owing to the time elapsed since their ascent also, many new crevasses had opened in the ice. (*The Conquest*, pages 350–353.)	18. Stuck descended Mount McKinley in two long days. This was partly due to the great care necessary on the shattered Northeast ridge. (*The Ascent*, pages 117–128.)
19. Browne reports feeling three distinct earthquakes in	19. The ice on the North-east ridge was found different

COOK. LLOYD.

BROWNE.

the neighborhood of Mount McKinley. The last one occurred just after his party had descended from Mount McKinley and consisted in a series of most terrific shocks continuing for about thirty-six hours, in which the earth heaved and rolled, boulders turned over and moved about, the earth and mountains were seamed and scarred, Mounts Brooks and McKinley avalanched in overpowering grandeur, the streams ran chocolate-colored from the earthslides that had dammed them, whilst the shocks were preceded by a deep detonation resembling the noise made by exploding steam and always coming from the same place—Mount McKinley. Earthquakes are evidently one of the attractions of the neighborhood. How far the effects of this earthquake extended is, of course, impossible to say, but evidently it shook and affected the whole of Mount McKinley and to some extent changed its configuration. (*The Conquest*, pages 188, 302, 303, 356–359.)

STUCK.

by Stuck from preceding climbers. The ice seems to have been all smashed by the earthquake most of the way up. (*The Ascent*, pages 40–42, 53–63.)

III.

MOUNT DENIAL.

The ascent of Mount McKinley by Dr. Cook was accepted unquestioningly by mountaineers and mountain clubs thruout the world for almost exactly three years after he had made it and then suddenly it was denied by certain persons who wished to prove that Dr. Cook had not discovered the North Pole. One of their arguments was that Cook's ascent of Mount McKinley was a romance and therefore that Cook's discoveries of Bradley Land, of Cook Land Ice, and of an endless field of purple snows at the North Pole must be imaginative dreams. Their logic about geographic evidence is exactly the same as the medieval logic about evidence which Dr. John William Draper, in one of his books, sums up as follows: "Of this presumptuous system, the strangest part was its logic, the nature of its proofs. It relied upon miracle-evidence. A fact was supposed to be demonstrated by an astounding illustration of something else! An Arabian writer, referring to this says: 'If a conjurer should say to me—Three are more than ten, and in proof of it I will change this stick into a serpent—I might be surprised at his legerdemain, but I certainly should not admit his assertion.' Yet, for more than a thousand

years, such was the accepted logic, and all over Europe propositions equally absurd were accepted on equally ridiculous proof." Foolish as this is, it is no more foolish than the queer notion many people still seem to have that the ascent of Mount McKinley is the vital point in regard to the discovery of the North Pole. It should cause no surprise, therefore, if, some bright morning, some medieval survivor should announce, for instance, that the ascent of Mount McKinley proved that General Grant did not take Richmond. But it is entirely due to the desire to invalidate the discovery of the North Pole by Cook, that the first ascent of Mount McKinley has been subjected to attacks of a virulence unparalleled in the history of mountaineering.

In pretending to deny Cook's discovery of the North Pole by denying his ascent of Mount McKinley, two sets of persons were called on as witnesses. The first set includes certain inhabitants of Alaska who did not share in Cook's ascent, but who spread the characteristic denial by dwellers round a peak of its non-ascent: and these, therefore, are ignorant witnesses. The second set are the followers of Cook up Mount McKinley, and undoubtedly whatever their motive, the taking away of the credit from Cook would give themselves more credit: and these therefore are interested witnesses. But in the case of the later climbers

of Mount McKinley, their denials do not apply to Cook only, but to all their predecessors. Lloyd denies Cook. Browne denies Cook and Lloyd. Stuck denies Cook and Lloyd, and while not denying Browne, repeats over and over again that Browne did not reach the top. There is a perfect epidemic of denials. So much so that it would be accurate to nickname the peak Mount Denial, instead of the name urged by Archdeacon Stuck, Mount Denali. And I should personally oppose calling the peak Denali, because it is the anagram of Denial.

This desecration of the greatest peak in North America by the denials of the tiny bipeds who crawled to its top is unfortunate and much to be regretted. When one thinks of its forms, its rocks, its tremendous precipices, its unequaled ice fall, its thunderous avalanches, its giddy arètes: and of its colors, dazzling whites, rich browns, dark purples, vivid emeralds:—apparently it should arouse in the breasts of even those who did not first ascend it, emotions deep and elevating. But not much: it is turned into a cockpit into which to hurl denials.

Certainly this is strange, for there is nothing in the world more glorious than a snow-clad peak. Not only in their sculptural quality of form, but in their pictorial impressions great mountains are unsurpassable in their weird beauty. Few persons realize the vivid tints which follow each other from

daylight to dark. Listen to Edward Whymper[27] anticipating Cook's "endless fields of purple snows" in the following description: "I set it [the tent] up, and turned again to the view; the sun was setting, and its rosy rays blending with the snowy blue had thrown a pale pure violet far as the eye could see; the valleys were drowned in a purple gloom, and the summits shone with unnatural brightness." But the Alps are not content with everyday color effects. On a fine morning, while ascending the Gross Glockner in Tyrol, Mr. E. Thurstan Holland records:[28] "I had been looking at this magnificent effect of the sunrise, when, happening to turn, I was surprised to see that our shadows upon the white snow at out feet were of a pale, though decided, green colour. Wishing to make certain of the fact, I asked one of my friends to look at the shadows and tell me what colour they were; and he immediately answered that they were green. This colour they retained for about ten minutes, until the sun had shown himself above the eastern range of mountains." It is certainly lucky that no one observed green snow on Mount McKinley: for if anyone had, he would have been buried under the biggest recorded avalanche of denials.

Cook's ascent of Mount McKinley was unassailed for three years, during which his narrative

[27] *The Alpine Journal*, 1865, Vol. II, page 8.

[28] *The Alpine Journal*, 1863, Vol. I, page 95.

was judged on its own merits. And what these are and how they appeared at the time to an unbiased mountaineer may be gathered from the following review by an anonymous writer of *To the Top of the Continent*, which appeared in *The Alpine Journal*,[29] then edited by the veteran climber and mountain historian, Mr. George Yeld. It gives such an excellent, condensed resumé by an expert mountaineer of the narrative as to be worth quoting from at length:

"This is a highly coloured narrative of travel in a country where perils by water are as frequent and perhaps even more serious than perils by land. It is obviously written to suit the taste of an American public. The author alleges that his subject strains the 'English Dictionary.' He has accordingly done his best to enlarge that volume. His style is exuberant, and words are put to what may seem, to European ears, strange uses. For instance, a niche cut out of a snow slope for a night shelter becomes a 'sidehill ditch,' the Alpine rope is a 'lifeline,' an avalanche a 'reducing train.' Even 'foot hills' are 'sky-piercing,' and loftier summits are alternately 'heaven scraped' and 'sky-scraping,' phrases which unluckily have anything but sublime associations! To readers accustomed to an Alpine literature, written with more method

[29] 1908, Vol. XXIV, pages 364–366.

and self restraint, the details here given of the great feat which was the author's chief aim, the first ascent of Mount McKinley (20,390 ft.) the highest mountain in North America, are somewhat difficult to follow. Moreover, the difficulty is greatly increased by the absence of any map of the district beyond a 'miner's map,' on the small scale of 20 miles to the inch."

"The following appear to be the main facts recorded by Dr. Cook as to an expedition remarkable in itself, and rendered still more remarkable by the late period of the year at which it was accomplished. The climbing party was composed of Dr. Cook and one companion, Mr. Bareille. They had no porters, but each carried a burden of over 40 lbs., comprising a silk tent, coats capable of being converted into sleeping-bags, provisions, cooking utensils, and certain instruments. They were absent from their base camp (1,000 ft.) 12 days. In the first three of the eight given to the ascent they marched 35 miles up a glacier; the remaining five were occupied in the actual climb, which began at about 8,000 ft. They slept two nights at 12,000 ft. and 16,300 ft. respectively in domed huts formed of snow-blocks (we are not told how the blocks were cut). The intervening night was spent in a hole cut on an ice-slope at an angle of 'nearly 60°,' and another night at 18,400 ft. in a silk tent (temperature 16° below zero).

The chief difficulties of the climb were encountered in the middle portion (12,000 to 16,000 ft.), after the northern ridge of the mountain had been gained. Here ridges, cornices, séracs, and ice-slopes were piled up in a bewildering confusion that has communicated itself to the narrative. The final 4,000 ft. took two days to surmount, the rarity of the air proving the chief impediment. The temperature on the top at 10 A. M. was the same as during the previous night in the tent. To bring the detailed narrative and figures into correspondence, the date of the final ascent should be 'September 15,' *not* 16, and on page 224 we should read seventh for 'sixth' day."

As will readily be noticed, the review is not quite friendly to Dr. Cook nor to Americans in regard to the American use of the English language. But in regard to the mountaineering involved, the reviewer accepts every point unquestioningly. The reviewer sees perfectly that Cook and Barrille might have marched 35 miles up a glacier in three days; and that in five days more they might have ascended from 8,000 feet to 20,300 feet, as this would be at the rate of only about 2,500 feet a day. The reviewer therefore implies, that there is nothing so very extraordinary in the ascent, nothing to raise the slightest doubt among the body of men who are best acquainted with the history of mountaineering and best acquainted with every detail

of practical mountaineering. The review, in other words, based on a thoro knowledge of practical and historical mountaineering, at a time when Dr. Cook had not been attacked for having discovered the North Pole, was entirely favorable to him and accepted without qualification all his statements about his manifestly possible ascent of Mount McKinley.

The denials by inhabitants of Alaska who did not climb Mount McKinley are not worth noticing, considering that these men know nothing of the matter.

The denial which Mr. Edward Barrille, Dr. Cook's companion, is reported to have made in an affidavit, but not until after Cook's return from the North Pole,[30] needs brief mention. It is significant, however, that Barrille seems to have been silent until the North Pole controversy was in full blast. Before that, Barrille does not seem to have published any writing denying the ascent, and his silence for three years would seem to have given consent rather than contradiction to Cook's claim. Barrille's denial, therefore, if he did deny, lacks the value that might have attached to it if it had been promptly made.

The published assertions, statements and denials of the men who claim that they also have ascended

[30] Dr. Frederick A. Cook: *My Attainment of the Pole*, 1911, pages 13, 14, 522–524.

Mount McKinley are the only ones which require a searching investigation, because these men have first hand knowledge of the mountain and because they are personally interested in the matter. And, in the order of time, Lloyd takes precedence.

Mr. Lloyd denies Dr. Cook's ascent.[31] He attacks Cook for not mentioning certain rocks near the summit,[32] and thus unwittingly presents distinct proof in favor of Cook by showing that there is rock near the summit.

Barring this, Lloyd's denial of Cook is summed up in the following two paragraphs:

"Furthermore, he absolutely could not pass over the glaciers that it is necessary to pass over to get up Mount McKinley—could not get over them at the time of the year he claims to have gone over them. There are glaciers there that he would have had to pass over to make the ascent, and at that time of the year neither he nor any other man could pass over them, not at any time of the year can any man pass over them without using snowshoes—and Dr. Cook mentions no snowshoes.

"This statement can be proved in two weeks from Fairbanks, and will not cost much money to prove —that it is impossible to make the trip without wearing snowshoes. No man would make the trip with snowshoes and not mention them."

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[31] *New York Times*, 5 June, 1910.

[32] *Ante*, page 54; *post*, pages 118, 119.

To what glaciers now does Lloyd refer in these paragraphs. Evidently only to the Lower McKinley Glacier, because in another place Lloyd says: "We also used ice creepers in climbing and snowshoes only over the lower glaciers;"[33] which clearly means that Lloyd's party did not use snowshoes on the Northeast ridge and above.

These attempts at censure by Lloyd are certainly wide of the mark and fall of themselves when one considers that Cook came up to the Northeast ridge from the east and not from Fairbanks; and that Cook never crossed nor said he crossed the glaciers on which Lloyd used snowshoes. Cook never was on the Lower McKinley Glacier at any point during his ascent and, therefore, can not be criticized for not wearing snowshoes in a place where he never was.

Lloyd himself, however, even if he did wear snowshoes among the crevasses of the Lower McKinley Glacier, certainly took unnecessary risks higher up, for he says: "We used no ropes in climbing."[34] Perhaps a hundred thousand ascents have been made with ropes and no snowshoes. It is only of late years that some ascents have been made with skis, but ascents made with snowshoes have been few indeed. And the experience of mountain climbers is all in favor of ropes as a

[33] *Ante*, page 38.

[34] *Ante*, page 38.

safeguard. Now Cook used the rope thruout, and even if he did not use snowshoes, he was much safer with rope and no snowshoes, than Lloyd with snowshoes and no rope.

Mr. Browne denies Dr. Cook in *The Conquest of Mount McKinley* in one special chapter entitled "The End of the Polar Controversy." There is not one word, however, about the North Pole or the South Pole in this chapter, which is taken up with the ascent of a little peak which Browne named Fake Peak, some 9,000 feet high, southeast of Mount McKinley, on the east side of Ruth Glacier, about half way between the terminal moraine of Ruth Glacier on the Chulitna River and the base of Mount McKinley. But why the ascent of Fake Peak settles the (North) Polar controversy, why it wipes Bradley Land from the map, why it explains Cook-Land-Ice, and why it gets rid of an endless field of purple snows at the North Pole, Browne does not explain in a single sentence. Browne's method of putting an end to the Polar controversy is certainly medieval in its logic.[35]

Mr. Browne also denies Dr. Cook's ascent of Mount McKinley and his method of denying it is equally medieval in its logic. It consists in leaving the ascent severely alone and talking of something else. This something else is likewise the same little peak to which Browne gave the

[35] *Ante*, page 65.

name Fake Peak, apparently as a denial of Cook's ascent. And since Mount McKinley can truly be nicknamed Mount Denial, and Mount Foraker therefore might be nicknamed Denial's Wife, Browne's Fake Peak might well be nicknamed Baby Denial. Browne publishes a small illustration of Baby Denial or Fake Peak with the following rather lengthy title: "The author photographing the Fake Peak. Tucker standing where Barrill stood. This view including the author, is used for a special reason. As short a time ago as March, 1913, a geographer accused the author of painting (by hand) the views of this peak with which we convicted Dr. Cook. Photo. by H. C. Parker."[36] Then Browne claims that his illustration, which he says is a photograph by H. C. Parker and which he admits certain people think was done by hand, and Cook's photograph of the top of Mount McKinley represent the same peak. A comparison of Cook's photograph of Mount McKinley as published in *To the Top of the Continent* and of Browne's illustration of Fake Peak as published in *The Conquest of Mount McKinley*, therefore, is in order.

In both pictures there is a man holding a flag. In Cook's photograph the flagman is standing on a rock which is the apparent top of the mountain. In Browne's illustration the flagman is standing on

[36] *The Conquest*, page 122.

some rocks below the apparent top of the mountain, which apparent top is a pointed snow dome behind and above the flagman. In other words, the apparent top in Cook's photograph of Mount McKinley and the apparent top in Browne's illustration of Fake Peak are different tops.

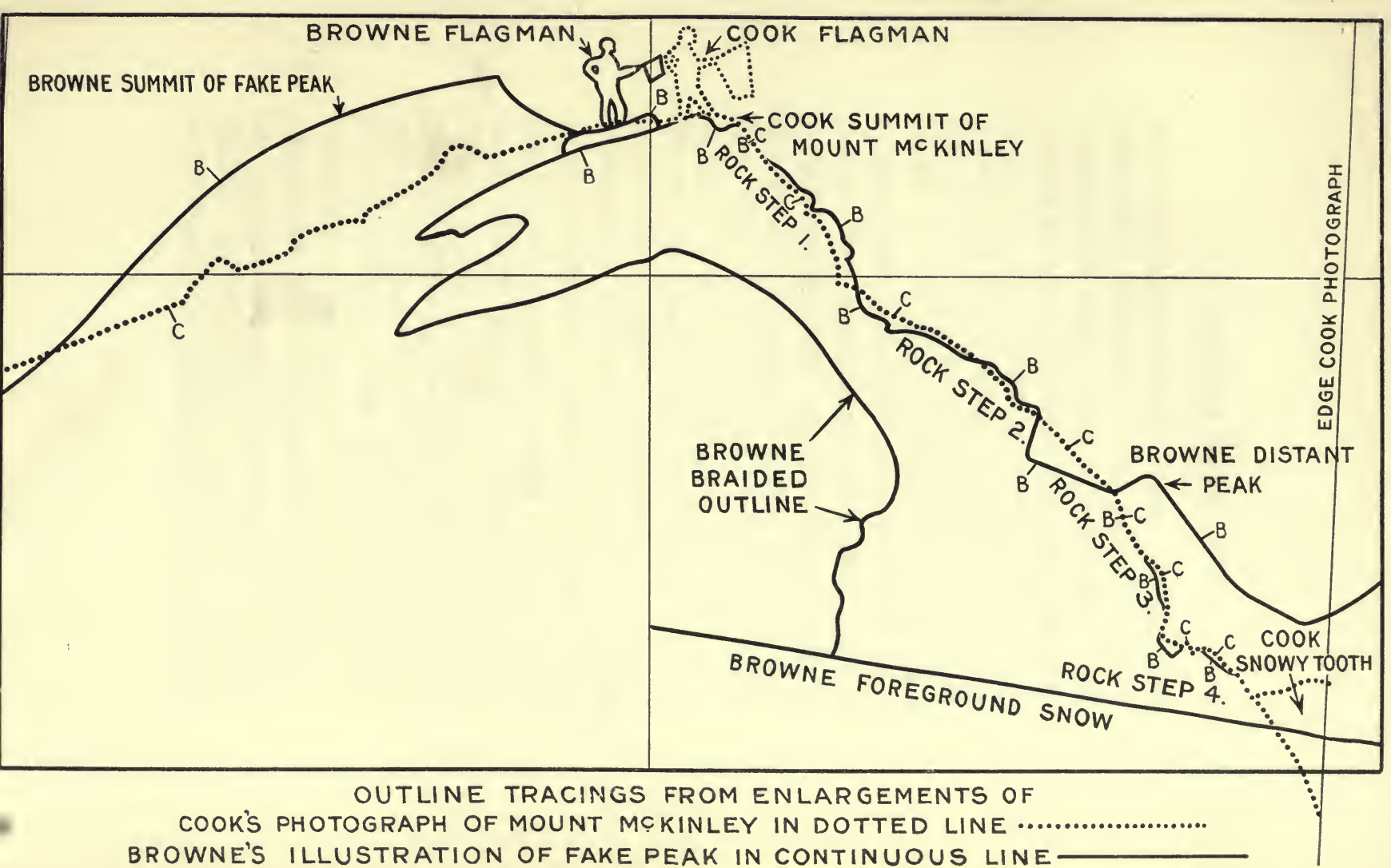
In Browne's illustration of Fake Peak there is a little rock rising up in front of the flagman. In Cook's photograph of Mount McKinley there is no such rock. Why is this? Rocks may fall thru gravity. But rocks only rise on a mountain when thrown up in a volcanic eruption.

In Cook's photograph of Mount McKinley, in front of and below the flagman, there is a big patch of snow. And besides this big patch, there are other little patches on ledges and crannies. In Browne's illustration of Fake Peak, all the visible rocks of Fake Peak are wholly bare of snow; there is not the faintest particle of snow on any ledge nor in any crevices, nor are the rocks anywhere even powdered with snow. Now surely if these pictures represented the same peak, the rocks to which snow clung in September would not be bare of snow in June!

In Cook's photograph of Mount McKinley the values, to use an artist's term, of the rocks are consistent thruout. The grays of the rocks spread across their surface and melt into the grayish white of the snows without any visible outline. In

Browne's illustration of Fake Peak, between the snow and the rocks there is a strong continuous outline, darker in value than the rest of the rock. It is something like the braid which was formerly sometimes used as a binding on some cheap coats for men: so that it would be accurate to speak of these rocks as braided rocks.

In Cook's photograph of Mount McKinley and Browne's illustration of Fake Peak, the outline of each mountain to the right of and below the flagman presents what might be called four steps in the rock, which, beginning at the top, may be numbered as Rock Steps 1, 2, 3, 4. In Browne's illustration there is a distant range of mountains. In Cook's photograph there is no such range of mountains; there is, however, a snowy tooth beyond the Rock steps, and this snowy tooth looks as if it were part of the Mount McKinley massif, possibly a snowy point of the South arète. Now if Cook's photograph of Mount McKinley and Browne's illustration of Fake Peak are enlarged by photography to the same size and a tracing is made of the outlines of the two mountains in the enlargements, it will be found that, as shown in the accompanying diagram, the outlines are not identical: they agree in some places, but they disagree in others. The outlines of Mount McKinley and of Fake Peak back of the flagmen are wholly different. The outlines of Cook's and Browne's



OUTLINE TRACINGS FROM ENLARGEMENTS OF
COOK'S PHOTOGRAPH OF MOUNT McKINLEY IN DOTTED LINE .....
BROWNE'S ILLUSTRATION OF FAKE PEAK IN CONTINUOUS LINE ——

Rock Steps 1, 2, 3, 4, are more nearly alike, but they do not coincide. The outline of Browne's distant mountain rises well above the center of Rock Step 3 and abuts against the center of Rock Step 3. The outline of Cook's snowy tooth, on the contrary, barely reaches the center of Rock Step 4. Cook's snowy tooth, therefore, is way below Browne's distant mountain.

There are thus at least six differences or divergences between Cook's photograph of Mount McKinley and Browne's illustration of Fake Peak. 1. The apparent tops of the two mountains are not the same. 2. The little rock rising before the flagman in Browne's illustration is lacking in Cook's photograph. 3. The rocks in Cook's photograph are covered or powdered with snow in places where snow is lacking in Browne's illustration. 4. The values in Cook's rocks are uniform thruout, while the values in Browne's braided rocks vary in their planes and their outlines. 5. The outline of Cook's Mount McKinley is different from the outline of Browne's Fake Peak. 6. The distant mountain in Browne's illustration rises way above the little snowy tooth in Cook's photograph.

These various differences or divergences between Cook's photograph of Mount McKinley and Browne's illustration of Fake Peak certainly strongly suggest different peaks: so strongly indeed

that one can but think that Browne made a mistake. The differences in the outlines and the characteristics of the two mountains and the differences in the positions of Browne's distant mountain and Cook's snowy tooth are so pronounced, so fundamental, that the only conclusion which seems possible is that Cook's photograph of Mount McKinley and Browne's illustration of Fake Peak represent different peaks.

That there are differences between Cook's photograph of Mount McKinley and Browne's illustration of Fake Peak was first noticed by Mr. E. C. Rost, of Chicago, an expert photographer, to whom I am much indebted for calling my attention to the matter. And it may be well to add that it is an easy matter for anyone interested in the subject to prove the differences in the shape of the two mountains for himself. All that need be done is to have some professional photographer make enlargements to the same scale of Cook's photograph of Mount McKinley and of Browne's illustration of Fake Peak; then to trace the outlines of the enlargements: when the divergences will be apparent beyond all cavill.

There are numerous and excellent photographs by Messrs. Parker, La Voy and Browne, published in *The Conquest of Mount McKinley*. Special attention may be called to those of Professor

Parker of "The Great Gorge"[37] and of "Mount Huntington;"[38] those of Mr. Browne of "Going Strong,"[39] of "Mount Dan,"[40] and of "Approaching the Pass;[41] and those of Mr. La Voy of "The Col"[42] and "The Backbone."[43] In all of these the photographic values are beautiful: the rocks, sometimes snow powdered on their cracks and ledges, melt with delicious naturalness into the snows: there are no sharp, hard outlines between the rock planes and the snow planes. In these photographs the majesty of the mountains is revealed as clearly as in the photographs of those master mountain photographers, Sella and Donkin.

Photography is so closely akin to art, that a few words about Mr. Browne's artistic efforts will not seem out of place here. His men and animals are distinctly good. His pictures of the Alaskan Brown Bear[44] and of the White Sheep[45] have plenty of life and action. The men and horses in his India ink drawing of "The 1906 Expedition Swimming

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[37] *The Conquest*, page 122.

[38] *The Conquest*, page 168.

[39] *The Conquest*, page 72.

[40] *The Conquest*, page 80.

[41] *The Conquest*, page 240.

[42] *The Conquest*, page 174.

[43] *The Conquest*, page 234.

[44] *The Conquest*, page 74.

[45] *The Conquest*, page 258.

the Pack Train"[46] are strong and virile: they have lots of snap. Some of Browne's landscapes are most successful. The view of Mount McKinley from the south[47] may be mentioned as a remarkable instance of conquering the enormous difficulties of painting a great mountain: it has atmosphere, values and color: none of which is easy to get. Some of Browne's mountain drawing, however, is not up to this standard, as, for instance, the mountains in "The 1906 Expedition Swimming the Pack Train."[48] In the best mountain drawing, the anatomy of the mountains is worked out from the center to the edges, and the outline is lost and found. Excellent and easily accessible examples of such mountain drawings are Turner's "The Gates of the Hills" and Turner's "Pass of Faido,"[49] and Edward Whymper's magnificent illustrations, perhaps the most perfect and artistic drawings of high mountains ever made.[50] Browne's mountains in "The 1906 Expedition" are not done on this principle; their anatomical structure, their gullies and ridges, are not sufficiently delineated, and they are bounded

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[46] *The Conquest*, page 12.

[47] *The Conquest*, Frontispiece.

[48] *The Conquest*, page 12.

[49] John Ruskin: *Modern Painters*, New York, John Wiley and Sons, 1879, Vol. IV, Frontispiece, and page 24.

[50] *Scrambles Amongst the Alps*, 1871, *passim*.

by hard, tight outlines. The peak to the left especially, has a long, even, almost unbroken outline: and such continuous outlines are not found in the best art.

After tilting with the windmill of Fake Peak, Browne apparently thinks it unnecessary to discuss analytically Cook's climb from Ruth Glacier to the top of Mount McKinley. He does not pay the slightest attention to Cook's long, detailed and careful narrative of his ascent in 1906 of Mount McKinley by the exact route above 12,000 feet which Browne claims he himself followed in 1912: he does not touch on any of the points in mountaineering which must be considered by any mountain historian studying the subject: he does not examine the heights climbed nor the distances traversed daily: he does not speak of Cook's description of the Northeast ridge: he does not refer to Cook's account of the Upper McKinley Glacier. Browne simply ignores everything connected with Cook's ascent of Mount McKinley from Ruth Glacier to the top.

The "Index" of Browne's *The Conquest of Mount McKinley* in itself alone verifies these statements. There is an index of the 1910 trip on the Ruth Glacier and the surrounding peaks, and in this index Cook's name appears in nine headings. There is also an index of the 1912 trip up the Northeast ridge and the Upper McKinley

Glacier, and in this index Cook's name does not appear. The "Index" of *The Conquest* is elementary proof that Browne entirely shelves Cook's ascent.

But no climber can thus dispose of a rival climber's claims without investigating them. A certain number of climbers have played the part of critics, but this Browne has not done. To criticize anybody or anything implies talking or writing about that person or that thing. You cannot criticize Leonardo da Vinci by abusing Rubens. I say "abusing Rubens," for to-day criticism has come to mean an unfavorable or hostile opinion of something which has been done or of some idea which has been enunciated, and it is almost always tinged with more or less, generally more, acerbity. But Browne does not discuss in any wise, from the standpoint of a mountain historian, Cook's ascent of Mount McKinley from Ruth Glacier to the top. And this is something which must be done by anyone who attempts to pass on the claims of the various climbers of Mount McKinley.

Mr. Browne denies also, not directly, but inferentially, the ascent of Mount McKinley by the Lloyd miners party. He does not make any examination of Lloyd's narrative, any more than he does of Cook's narrative. Browne does not seem aware of the fact that Lloyd says he went up the

South Peak, as well as the North Peak. He does not place Lloyd's name in the "Index" of *The Conquest of Mount McKinley*. In fact he totally ignores everything about Lloyd's ascent, except that he says that he did not see the flag pole which Lloyd states he raised on the North Peak. Browne writes:[51] "Report has it that the Lloyd Mount McKinley party had reached this peak or one of its northern shoulders and there raised a pole above a pile of rocks. * * * We not only saw no sign of a flag pole, but it is our concerted opinion that the Northern Peak is more inaccessible than its higher southern sister." This meager notice of the Lloyd ascent, therefore, shows Browne denying, not absolutely but nearly so, the success of the mining party, much as he does that of Dr. Cook. Browne's remarks prove that if the miners had not planted a pole near the top and if Stuck had not stated that he had seen this pole, the miners ascent would have been discredited. Cook, unfortunately, had no such pole to leave behind. But since Browne's denial of Lloyd's claims is proved incorrect, it implies almost to a certainty that his denial of Cook's claims is also incorrect. Browne's attitude towards Lloyd, in brief, is much the same as his attitude towards Cook, and his method of denying Cook and Lloyd consists, in the main, in omitting almost all the facts and in

[51] *The Conquest*, pages 340, 341.

paying no attention to anything Cook or Lloyd said they did.

Archdeacon Stuck, in his turn, likewise denies his predecessors, and he also is not convincing. First because he is the most interested witness of all. This is easily demonstrated. Browne and Parker admit that they did not reach the summit of Mount McKinley. If then Cook and Lloyd could be proved not to have reached the summit of Mount McKinley, Stuck could claim that his party made the first ascent. It is readily apparent that were Cook and Lloyd discredited Stuck would be the gainer. And Stuck certainly does state flatly that Cook and Lloyd did not get to the top of Mount McKinley, and he also certainly does claim that he himself made the first ascent of Mount McKinley! A claim which he formulates most naively in one instance by saying "So that it seemed as if the mountain top had waited for us."[52]

From the following correspondence, which was published in the New York *Sun*, it may be gathered also that Archdeacon Stuck is not sufficiently acquainted with the history of mountaineering to criticize comparatively mountain ascents.

"K2.

"To the Editor of the Sun—Sir: In the November *Scribner's Magazine*, page 552, Archdeacon Stuck makes the following statement: "The

[52] *Scribner's Magazine*, 1913, page 532.

English geographers prefer K2, the surveyor's designation of the second highest peak of the Himalayas, which the Duke of Abruzzi climbed in 1909, the highest point ever reached by man." This will undoubtedly be news to all mountain climbers and geographers, and especially to the Duke of the Abruzzi himself, to whom the Archdeacon should cable at once the glad tidings.

(Signed) "EDWIN SWIFT BALCH.

"Philadelphia, Pa., December 30."[53]

"K2.

"TO THE EDITOR OF THE SUN—SIR: I have waited more than two months for Mr. Edwin Swift Balch's letter, and am glad that he has at length discovered my mistake. I discovered it myself weeks before the article was published in *Scribner's Magazine*, but not in time to get the correction made.

"The annoying thing about it is that K2 and the Duke of the Abruzzi were a mere flourish of embellishment to show how much I knew about mountain climbing, dragged in by the scruff of their necks, so to speak.

"The main fault lies with the new Encyclopedia Britannica: If Mr. Balch will look up K2 in that interesting work he will find the authority for my statement. I was surprised at it when I read it,

[53] *The Sun*, New York, Wednesday, 31 December, 1913.

but supposed that in my exile in the north I had missed the account of the exploit: it did not enter my head to doubt the Britannica. Now that the blow has fallen I shall sleep in peace. But for such a sarcastic gentleman, how dilatory Mr. Edwin Swift Balch has been!

(Signed) "HUDSON STUCK,
"*Archdeacon of the Yukon.*

"New York, January 2."[54]

Archdeacon Stuck's admission in this letter, that he discovered, weeks before his article was published, that one of his statements was a mistake, is noteworthy.

Archdeacon Stuck's remarks about Dr. Cook do not overflow with the milk of human kindness. He expresses disapproval of *To the Top of the Continent* by saying that it was perused by "man after man from the Kantishna diggings, and the acute way in which they detected the place where vague 'fine writing' began to be substituted for definite description."[55] Stuck jumps on Cook for speaking "about 'the heaven-scraped granite of the top;'" and also says "nor is the conformation of the summit in the least like the photograph printed as the 'top of Mt. McKin-

[54] *The Sun*, New York, Saturday, 3 January, 1914.

[55] *The Ascent*, page 167.

ley.'"[56] He criticizes Cook also by saying that "In his account of the view from the summit he speaks of 'the ice blink caused by the extensive glacial sheets north of the Saint Elias group,' which would surely be out of the range of any possible vision, but does not mention at all the master sight that bursts upon the eye when the summit is actually gained—the great mass of 'Denali's Wife' or Mount Foraker, filling all the middle distance. We were all agreed that no one who had ever stood on the top of Denali in clear weather could fail to mention the sudden splendid sight of this great mountain."[57] Finally Stuck denies positively Cook's ascent in the following words: "It is quite impossible to follow his course from the description given in his book, 'To the Top of the Continent.' This much may be said: from the summit of the mountain, on a clear day, it seemed evident that no ascent was possible from the south side of the range at all. That was the judgment of all four members of our party."[58]

It seems curious that "man after man from the Kantishna diggings" was able to detect "the place where vague 'fine writing' began to be substituted for definite description" in *To the Top of the Continent.* These Alaska miners must have been

[56] *The Ascent,* page 165.

[57] *The Ascent,* page 165.

[58] *The Ascent,* page 165.

cleverer, better educated, and more thoroly versed in mountain lore than the reviewer in *The Alpine Journal*[59] who never noticed this change. Personally it seems to me that there is no break in style from the beginning to the end of the book which, on the contrary, shows the same unusual artistically descriptive powers as *My Attainment of the Pole.*

In attacking Cook for speaking of granite at the top of Mount McKinley, Stuck is oblivious of the fact that the first week in June and the second week in September are different times of the year, and he is doubtless unaware of the fact that a mountain may be buried in snow and ice in June and show outcrops of rock in September. That Stuck found the top of Mount McKinley snow covered and Cook found some bare rock may be explained easily by perfectly natural causes, and this matter will be discussed later.[60] Stuck condemns Cook for speaking about the ice-blink above the Saint Elias group, which he considers would be "out of the range of any possible vision" from Mount McKinley. In so doing Stuck shows that he is not acquainted with the history of polar exploration: for the ice-blink carries for almost inconceivable distances. Stuck also says that Cook mentions this ice-blink in his account of the view from the

[59] *Ante*, pages 69, 70, 71.

[60] *Post*, pages 119, 120.

summit, while the fact is that Cook speaks of it on leaving his 18,400 foot camp in the early morning. But this occurrence will also be examined further on.[61] Stuck's animadversions on Cook for not speaking of Mount Foraker will likewise be noticed later.[62]

Stuck's chief denials of Cook, however, are first his statement that it is quite impossible to follow Cook's course from the description given in *To the Top of the Continent.* But why it is impossible for Stuck to follow, in the spirit, Cook's course from Cook's description must remain an enigma, since by comparing Cook's description in *To the Top of the Continent* with Stuck's description in *The Ascent of Denali,* it is evident that Stuck followed, in the flesh, step by step, Cook's course from 12,000 feet to the top. Stuck's second chief denial of Cook is his statement that in the judgment of all four members of Stuck's party no ascent of Mount McKinley was possible from the South. Well, supposing it is not: what has that to do with the matter? Cook did not ascend, and nowhere claims to have ascended, Mount McKinley from the South. Cook says he ascended from the East and the North, by the Northeast ridge, and by the Upper Northern McKinley Glacier: the identical route Stuck says he himself ascended by.

[61] *Post,* pages 112, 113.

[62] *Post,* pages 120, 121.

But Stuck does not examine Cook's narrative: he passes over almost all the facts in silence and denies Cook abruptly in two assertions which should never mislead any mountain historian.

Of the Lloyd expedition, Archdeacon Stuck has a good deal to say. He grants their ascent of the North Peak of Mount McKinley but says of their climb "as to which feat a great deal of incredulity has existed in Alaska, not without some reason."[63]

Stuck says the Lloyd party discovered the route as far as the Grand Basin at 16,000 feet, which Browne and Stuck followed,[64] and repeats this statement several times. "This ridge, that the pioneer climbers of 1910 went up at one march."[65] "There is only one way up the mountain, and Lloyd and his companions discovered it."[66] "To Lloyd * * * probably also belongs the original discovery of the route that made the ascent possible."[67] "The Lloyd expedition was the first to discover the only approach by which the mountain may be climbed."[68] "On 10th April * * * they went up the ridge to the Grand Basin, crossed

[63] *Scribner's Magazine*, 1913, page 546.

[64] *The Ascent*, pages 17, 18.

[65] *The Ascent*, page 42.

[66] *The Ascent*, page 177.

[67] *The Ascent*, page 174.

[68] *The Ascent*, page 168.

the ice to the North Peak, and proceeded to climb it."[69]

Stuck reports that all the members of his party sighted Lloyd's flagstaff on the North Peak of Mount McKinley.[70]

Stuck also says of Lloyd himself: "In that account Lloyd is made to claim unequivocally that he himself reached both summits of the mountain. * * * As a matter of fact, Lloyd himself reached neither summit, nor was much above the glacier floor."[71]

Archdeacon Stuck's statements about the Lloyd expedition show in the first place that the natives of Alaska doubted the ascent. Stuck says "not without some reason." What reason? There is no apparent reason, beyond the fact that stay-at-homes are always prone to doubt travelers: and this is due not to reasoning, it is due to human incredulity in the unusual.

In the next place Stuck gives to the Lloyd party the credit for discovering the easiest route up the mountain. This is accurate in regard to the stretch from the northwestern base of Mount McKinley up to the Northeast ridge at about 12,000 feet. From there to the top, however, the easiest route

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[69] *The Ascent*, page 170.

[70] *Ante*, pages 55, 57.

[71] *The Ascent*, page 171.

had been described and the description published by Dr. Cook, three years before the Lloyd ascent.

Third, Stuck, backed by the testimony of his three companions, proved the ascent of the North peak of Mount McKinley by the Lloyd party.

Stuck positively and empirically asserts that the Lloyd party did not ascend the South Peak of Mount McKinley, and that Lloyd himself did not ascend much above the glacier floor; that is, that Lloyd did not climb even the Northeast ridge. Stuck does not offer any evidence for his denial of Lloyd's ascent except that he says that some of Lloyd's companions stated that Lloyd did not go to the top. Stuck claims that "He has been at the pains of talking with every member of the actual climbing party with a view to sifting the matter thoroughly. For, largely by the fault of these men themselves, through a mistaken though not unchivalrous sense of loyalty to the organizer of the expedition, much incredulity was aroused in Alaska touching their exploit."[72] Now if Lloyd did not ascend the last 8,000 feet of the mountain, how in the world was Lloyd able to give Mr. Thompson, Editor of the *Fairbanks News Miner*, a long, naive, and evidently truthful account of the ascent of both summits. When mountain historians of the future compare Lloyd's statements, based undoubtedly on first-hand knowledge of the

[72] *The Ascent*, pages 170, 171.

mountain, with Stuck's empirical denial of these statements, there cannot be much doubt as to what their verdict will be.

Stuck takes pains to make it thoroly known that Browne and Parker did not complete the ascent of Mount McKinley by three or four hundred feet in altitude, and that they were about one mile from the summit when they stopped.[73] He rubs this fact well in in many casual innuendoes in his book: "Parker, Browne and La Voy * * * reached a spot within three or four hundred feet of the top of the mountain."[74] "The only expedition * * * organized by Professor Parker and Mr. Belmore Browne in 1912, which came within an ace of success."[75] "The falling short of complete success of this very gallant mountaineering attempt seems to have been due, first to the mistake of approaching the mountain by the most difficult route * * * the mistake of relying upon canned pemmican for the main food supply."[76] It is of course permissible, if unkindly, to gloat over the not quite complete success of Browne and Parker's plucky attempts to ascend Mount McKinley; but it is not permissible, at least not if one wishes to be accurate, to say they were beaten

[73] *The Ascent*, note, pages 97, 98.

[74] *The Ascent*, page 41.

[75] *The Ascent*, page 175.

[76] *The Ascent*, pages 178, 179.

by taking the wrong route and by canned pemmican: Browne and Parker were beaten, as they say themselves they were, by blizzards against which no man could have conquered.[77]

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[77] Just as this book was going to the press, I received from Mr. Ernest C. Rost a copy of his critical monograph, *Mount McKinley, its bearing on the Polar Controversy*, New York, 1914, in which he discusses analytically Cook's photograph of Mount McKinley and Browne's illustration of Fake Peak.

IV.

COMPARISONS.

When one examines the narratives of each of the four explorers separately, they convey, in all four cases, a sense of the genuineness of the narratives. Dr. Cook's account in *To the Top of the Continent* gives details about his equipment, the weights carried, the distances traversed and the vertical heights ascended each day, the times of the daily marches and the time of the entire journey, which are manifestly possible and which in themselves carry conviction of the reality of his ascent. Lloyd's story in *The New York Times,* if rough and muddled, nevertheless bears all the earmarks of veracity. Mr. Browne's statements in *The Conquest of Mount McKinley,* about the equipment, the weights and the manner in which they were carried, the distances traversed in a day's journey, the vertical heights ascended in the given times, and above all Browne's admission that he had not stood quite on the very top of Mount McKinley, carry conviction that Browne did what he said he did. Archdeacon Stuck, from his statements in *The Ascent of Denali,* judging from his equipment, the weights carried, the distances traversed and the vertical heights daily ascended, and the time of his entire journey, must also be credited with

giving details which place his ascent among possible ascents.

When on the other hand one examines the narratives of the four explorers comparatively, many coincidences will be noticed which cast much light on the four ascents. And in looking at each narrative, the training and previous experience of each narrator should be taken into account. Dr. Cook is a graduated M.D., who had spent one winter in the Arctic with Admiral Peary and one in the Antarctic with Captain de Gerlache, and who, previous to his successful ascent of Mount McKinley, had carried out also two journeys in its foothills. His winter in North Greenland, and his winter in West Antarctica, the first spent by man beyond the Antarctic Circle, had made of Cook an expert on ice and snow, and they explain why he was so much better acquainted than most mountaineers with all the details, such as how to build snow houses, connected with ice and snow travel. Examined comparatively with the other narratives, Cook's narrative, both in its observations and its descriptions, is the most satisfactory of the four. And in examining it, one must always bear in mind that it is the first account, published three years before any other, of the easiest route up Mount McKinley, of the Northeast arète, of the Upper McKinley glacier and its guardian granite rocks, of the ridges leading to the North and South

Peaks, and of the North and South Peaks themselves.

Lloyd's party was made up of poorly educated men, who had had no previous mountain experience, only experience on more level snow-covered ground, before their ascent. And owing to their lack of literary training and of mountain experience, Lloyd's narrative is the most difficult of the four to unravel, and his observations are the hardest to use comparatively, altho of his truthfulness there can be no doubt.

Messrs. Browne and Parker are educated men, who had both had some mountain training, some of it in previous attempts on Mount McKinley, one of these with Cook. Browne himself draws landscape and animals, which implies that he is an observer of outdoor nature. His narrative is clear and forcible, and unintentionally it corroborates and verifies Cook's narrative and Lloyd's narrative, and is itself verified by Cook's narrative.

The Rev. Dr. Stuck was born in England and spent his youth there.[78] He is an archdeacon, which means of course that he is an educated man. Before his ascent of Mount McKinley, Stuck had done some climbing in the Rocky Mountains, and had ascended Mount Tacoma. He apparently disapproves of American scientific men, and because

[78] *Who's Who in America.* Vol. VIII, 1914; 1915.

he met one scientist who was not familiar with the novels of Dickens, he proposes to suppress "illiterate Ph.D.'s."[79] His narrative seems less direct and less scientific than the narratives of Cook and Browne: despite which, many of his statements, perhaps unwittingly, corroborate Cook, Lloyd and Browne, and one or two of his observations are verified by the narratives of Cook, Lloyd and Browne. In fact, the four narratives, when compared, verify each other. In comparing now the four narratives in the succeeding pages, it must be noted that the figures at the heads of the following paragraphs refer to the figures in Chapter II, and that the comparisons in each case are drawn from the corresponding passages in the parallel columns.

1. The first part of Cook's ascent cannot be compared at all with the first part of the ascents of his three followers. It can be compared somewhat with the account of Browne's attempt in 1910, on which Browne traveled some distance at least up Ruth Glacier. As Browne, however, did not reach the Northeast ridge by this route and as Cook's journey was a rapid dash over unknown, uncharted, and unnamed ground, it is impossible to compare Cook's and Browne's accounts of this part of their trips satisfactorily. Lloyd, Browne and Stuck seem to have followed the same route to

[79] *The Ascent*, pages 110–114.

the Northeast ridge and their accounts of the beginning of their trips can therefore be compared. Cook reached the Northeast ridge from the east, Lloyd, Browne and Stuck reached it from the west, and all four parties struck it apparently at about the same spot, between about 11,500 feet and 12,000 feet, and from there on, therefore, the four ascents can be compared thruout.

2. Cook traveled "light" and quickly; Lloyd, Browne and Stuck traveled "heavy" and slowly. For every mile that Cook traveled, Lloyd, Browne and Stuck traveled three or five or even more miles. Cook, both going and coming, marched straight ahead; his Arctic and Antarctic training having taught him how to reduce his baggage to the indispensable minimum for a long journey over ice and snow. Lloyd, Browne and Stuck, on the contrary, advanced supplies some distance, then returned over the same ground for more supplies which they carried forward again, and in certain parts of their journey they repeated this performance a second or even a third time, thus going three or five or seven times over the same ground. The mass of outfit and the weights that the Lloyd, Browne and Stuck parties staggered along under were indeed so tremendous that it seems surprising that they could carry them at all. Stuck's party might almost be considered to have had a streak of luck when one of the party

dropped a match into the baggage while his companion was not looking. The back-breaking piles of impedimenta are sufficient to explain why Lloyd, Browne and Stuck were so much longer on their ascents than was Cook. In fact Cook's times have just about the proper relation they should have to Lloyd's, Browne's and Stuck's times, and afford a distinct proof of the genuineness of Cook's achievement.

3. Cook, Lloyd probably, Browne, and Stuck all struck the Northeast ridge at about the same altitude, somewheres between 11,500 feet and 12,000 feet, at what must have been about the same place.

4. Cook says he climbed the Northeast ridge. Lloyd apparently climbed the Northeast ridge. Browne says he climbed the Northeast ridge. Stuck says he climbed the Northeast ridge. Why this singular unanimity? Apparently because the Northeast ridge is the best road up the mountain. But who announced to the world that the Northeast ridge was the right way? Cook! Nothing whatever was known about the Northeast ridge before Cook's ascent, for no one had been within many miles of it. And who first affixed to this ridge the name "Northeast ridge"? Cook! Which historic fact Archdeacon Stuck omits to mention when he says that it was the Parker-Browne party who put upon this ridge the designation "Northeast." But how could Cook have guessed that the

Northeast ridge was the right way? Turn to the history of the Matterhorn. It was tried over and over again by Whymper, by Tyndall, by Giordano's party, and almost always by the Breuil arète, which looked the easy way. Finally it was conquered at the first shot by the repellent-appearing Zermatt face.[80] Or turn to the history of the Grande Meije. It was tried many times on different sides by leading climbers with the best Alpine guides, before it was conquered by M. de Castelnau with the two Gaspards who ascended by a route "So forbidding that it long deterred everyone from trying."[81] The mere announcement that the Northeast ridge is the easiest way up Mount McKinley, is, in itself, decided proof for Cook.

How utterly impossible it was for anyone to know anything about the Northeast ridge before Cook's ascent is shown also thru the story of the Aiguille d'Argentière. The Sardinian Ordnance Survey prepared a map of the Mont Blanc range and marked on it two peaks, the Aiguille d'Argentière and the Pointe des Plines, with a difference of 672 feet in altitude at a distance of one and a half miles from each other. It was not till 1863 that Mr. Adams Reilly discovered that these supposed

[80] Edward Whymper: *Scrambles Amongst the Alps*, 1871, John Tyndall: *Hours of Exercise in the Alps*, 1873.

[81] *The Alpine Journal*, Vol. IX, page 125.

peaks were one and the same peak, mis-surveyed from different sides.[82] And since such an error was possible for a government survey, just near a center like Chamonix, it is evident that no individual traveler in the Alaska wilderness, miles away from and thousands of feet below the Northeast ridge, could have told about the steepness of its slopes or that it was the easiest way up Mount McKinley. To find out it had to be reached and Cook was the man who, four years before anyone else, did reach it.

Now what do the four climbers tell us of the Northeast ridge? From his camp at 12,000 feet Cook thought that every possible line of ascent in sight was swept by avalanches except the Northeast arète, and even that seemed hopeless. He tried it nevertheless and between about 12,000 to 14,000 feet followed this snow arète "with a sheer drop of about 4,000 feet to either side." Browne followed Cook's track along the arète so closely, that if he had only come a few years earlier, he might have used Cook's footsteps. In saying that the ridge was so sharp that he had to chop off the crest, and that on the left it dropped for 5,000 feet at a dizzy angle and that on the right it fell almost straight for 2,000 feet, Browne corrobo-

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[82] *The Alpine Journal*, 1863, Vol. I, pages 257–274: and 1865, Vol. II, pages 97–114. Edward Whymper: *Scrambles Amongst the Alps*, Chap. XI.

rates Cook almost exactly. That Browne spent so many days on this ridge is simply due to the fact that he kept running up and down, relaying wagon-loads of impedimenta. Stuck found the Northeast ridge, which he goes so far as to say is perhaps the only route up the mountain and in which statement he is almost surely in error, a confused jagged mass of rocks and ice. And it was the step cutting in this ice, as well as the enormous amount of paraphernalia he was burdened with, which caused Stuck to spend so much time on the Northeast ridge.

Lloyd's narrative, unfortunately, is so confused that it is, especially about the Northeast ridge, of almost no use for purposes of comparison. As an instance of the perplexing nature of Lloyd's account, let us take Tunnel Camp. Where was Tunnel Camp? Was it at the bottom or the top of the Northeast ridge? There's the rub! Lloyd says that they took "a jag of freight" with the help of their dogs almost up to Tunnel Camp. But they could scarcely have taken a dog team up the Northeast ridge, even tho Dr. W. A. B. Coolidge's dog Tschingel did climb many a big peak in the European Alps. It seems therefore most probable that Tunnel Camp was at the bottom of the Northeast ridge at about 12,000 feet.

5. Towards the top of the Northeast ridge, at about 14,000 feet, Cook says the slope was nearly

60°. Browne verifies this statement by his assertion that in going up to 13,200 feet he measured one slope of 50° with a clinometer and traversed slopes of 60° or more, which he did not dare to stay on long enough to measure. Of the upper portion of the Northeast ridge, Stuck says that, tho less broken than the lower portion, it was terribly steep. Browne and Stuck thus both corroborate and verify Cook absolutely, and verify themselves also, thru one of those details which the first man cannot invent but must observe, and which the following men probably do not think of inventing. And when we consider that this ridge is the key to what is probably the easiest route up Mount McKinley, and that Cook was the man who found this route and climbed this ridge, it would be but just to commemorate Cook's achievement by calling this ridge "Cook ridge."

6. Cook rose from about 14,000 feet to 16,300 feet in one day. He found the sharp arète die out some distance beyond his 14,000 foot camp and on that day "soon after noon, we swung from the arète easterly to the glacier." So this must have been somewheres about 15,000 feet. At about 15,400 feet Cook photographed a rocky arète of great rock slabs. Browne speaks of the knife-edged ridge up to 14,400 feet and at 15,000 feet he camped under some great granite slabs. Stuck at about 15,000 feet got off the arète on to the Upper

McKinley Glacier and came straight to great upstanding granite slabs. That is to say, between about 14,000 feet and 15,400 feet Cook, Browne, and Stuck agree perfectly in their statements about the Northeast ridge and about the great granite rocks near the top, which means that they followed identically the same track. There is no invention possible here by the first man. The later climbers might have copied their predecessor: but the first man had nothing to record from except his observations. This is proof positive of Cook's veracity.

7. At about 16,300 feet, Cook camped on the Upper McKinley Glacier on a little snow field in the shape of an amphitheatre where the snow could be cut into blocks for a snow house. Browne at 15,800 feet and 16,615 feet camped on precisely such little snow fields on the Upper McKinley Glacier. Stuck camped at 16,000 feet, 16,500 feet, 17,500 feet and 18,000 feet on the snow fields of the Upper McKinley Glacier. Browne and Stuck again verify Cook.

8. Beyond his 16,300 foot camp, Cook was surprised at the great spread of surface. From the foothills he had previously noted that there were two peaks, but it was not till Cook was on the Upper McKinley Glacier that he discovered several little ranges running to them. Lloyd mentions the high ridge running to the South summit.

Browne, at his 16,615 foot camp, speaks of the great blue ice slopes which, to the north, led up to the granite buttresses of the North Peak, and of the frozen snow fields which, to the south, swept gently to the rock-dotted sky-line of the Northeast ridge in an easy grade to the South Peak. Browne's and Stuck's photographs show the great spread of surface. But where, before Cook published his narrative, can one find any account of this broad vast snow field hemmed in by two ridges leading respectively to the Southern and Northern summits? And the answer is that you cannot find any description of the kind, for no one knew of this snow field and of these ridges before Cook. They were Cook's discovery and he was the first to tell the world of them.

9. Cook says that beyond 16,300 feet the climbing was ridiculously easy. Browne speaks of the final grades of the summit rising "as innocently as a tilted snow-covered tennis-court." Stuck says that with the exception of the Northeast ridge, Mount McKinley presents no "special mountaineering difficulties of a technical kind": the Upper McKinley Glacier in fact was merely a long snow grind. Here is another point which Cook was the first to announce to the world: there was nothing known about the mountaineering points of the ascent, of its easy spots nor of its difficulties, before Cook published his account.

10. Beyond 16,000 feet all four parties complain of the rarefied air. On rising towards 17,000 feet and beyond Cook had to stop every hundred steps and puff; on rising towards 19,000 feet he had to stop every twenty steps and puff: his legs were of wood and his feet of stone. Lloyd's party all had to breathe thru their opened mouths: they could not get enough air thru their nostrils. Browne beyond 16,000 feet suffered all the time from shortness of breath. His party changed leaders every half hour. Altho they moved quietly and steadily and seemed to make good time, they rose only 400 feet an hour. At 15,000 feet Stuck says the altitude was not so high as to induce the acute breathlessness from which he suffered higher up upon any exertion. But Stuck, as he clambered up the Upper McKinley Glacier, became more and more affected by the altitude and had to be hauled up to the summit, where he fell unconscious for a moment. The other members of Stuck's party were not much affected by the thinner ozone. Nevertheless, as a consensus of experience, it is apparent that the effects of the rarefied air are unusually severe on Mount McKinley: certainly much more so than at similar altitudes in the Himālaya. There is probably a cause for this, and it may be due to the intense cold weakening the powers of resistance of the climbers. And that the atmosphere of the higher easy slopes of Mount

McKinley is so unusually deadly to a climber's lungs was first announced to the world by Cook.

11. Cook, Browne, and Stuck all complain of the cold, which was polar in its severity. It has been noticed on other ascents, in the Himālaya for instance, that cold is more felt on a high mountain than it is at lower altitudes, so it is not surprising this should be the case also on Mount McKinley.

12. On leaving his 18,400 foot camp, Cook noted "the ice-blink caused by the extensive glacial sheets north of the St. Elias group." Here speaks the experienced polar traveler; the observer who had spent a winter in Greenland, and a winter in West Antarctica. His trained eye instinctively spotted the ice-blink due to the huge glaciated area extending on and round Mounts Wrangell, Blackburn, Logan, Saint Elias and others, an area beginning at a distance of less than 200 miles from Mount McKinley. And the ice-blink over this tremendous snowy range would be easily visible at 200 miles to an observer at 18,400 feet on Mount McKinley. Ice-blinks and land-blinks have been seen at immense distances. Lieutenant Commander Ringgold, from the deck of his ship, saw the "loom usual over high land" over the Balleny Islands, East Antarctica, from a distance of about 100 miles;[83] and Sir James Clark Ross, from the deck of his

[83] *Narrative of the United States Exploring Expedition*, Vol. II, page 469. Edwin Swift Balch: *Antarctica*, pages 142, 171.

ship, saw the ice-blink over South Victoria Land, East Antarctica, at a distance of at least 150 miles.[84] If Ringgold and Ross had been standing at 18,400 feet, instead of at sea level, they could have seen the land-blink or ice-blink easily at 200 miles.

This observation of Cook's of the ice-blink is one of those apparently trivial details which no man would think of inventing, and which therefore carries conviction. It does so all the more, because, in the whole of Alpine literature, there is, perhaps, no other recorded instance of seeing from one range of mountains the ice-blink over another range of mountains. One reason is that there are few mountain ranges outside of the Polar regions where the glaciation is sufficiently extensive to produce the ice-blink. Another reason is that few mountaineers have been also polar travelers and therefore if there were an ice-blink few mountaineers would notice it. From both these causes, Cook's observation is almost solitary, if indeed it is not unique, in the annals of mountaineering, and its extreme rarity is excellent proof of its genuineness. There is, perhaps, no single circumstance in Cook's entire narrative which proves more conclusively that Cook ascended Mount McKinley than his observation of the ice-blink over Mounts Wrangell and Blackburn.

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[84] *Voyage of Discovery and Research in the Southern and Antarctic Regions*, 1847, Vol. I, page 183.

13. Lloyd claims to have ascended, on two consecutive days, first the South summit, then the North summit of Mount McKinley. On both days he started from Tunnel Camp, and he had cut beforehand steps well beyond Tunnel Camp, probably up the Northeast ridge to the Upper McKinley Glacier. If Tunnel Camp was at an altitude of about 12,000 feet, to climb Mount McKinley in one day meant ascending 8,000 feet and down again thru the rarefied air of the coldest of summits. But fortunately for the Lloyd party, they left a flag pole on the North Peak. And since they did one peak it is idle to deny that they did the other. The mountaineering difficulties were the same in both cases, the steps were ready cut, and the only question would be whether any human beings could have sufficient endurance to repeat such an ascent twice running? And the answer is that they might have such endurance. Swiss guides have certainly gone up a big peak one day, and another one the next day; and I believe sometimes a third one the third day. Tremendous feat it was to climb Mount McKinley from 12,000 feet to the top in one day. Nevertheless if it was done, and there seems every reason to think it was, then there are plenty of examples, among the Carrels and the Maquignaz' and the Almers and the Burgeners, to prove that it was possible to do it again on the morrow. But as a feat of endur-

ance this one of the Lloyd party has never been surpassed.

According to Browne's own statements, his party did not reach the summit of Mount McKinley. On their first attempt, at about 19,000 feet, they were struck by a blizzard and, altho they climbed up to beyond 20,000 feet, they did not see anything of the summit which was then close at hand. On their second attempt they reached 19,300 feet, and again were struck by a blizzard, which of course prevented them from seeing anything of the summit from nearer than 1000 feet distance. Browne also publishes two photographs, looking towards the summit of the upper snow fields and taken respectively from altitudes of 18,600 and 19,000 feet. The apparent summit in both pictures seems to be entirely snow covered, but this was at the end of June. In the beginning of September, the summit might look quite different.

Browne's party, therefore, not only never saw the summit of Mount McKinley nearby, but on account of blizzards, their nearest viewpoint of the summit was from more than 1,000 feet below it. Now at 1,000 feet below the summit of a mountain, no one can tell what that summit does look like. Every mountaineer knows, even if he may not wish to say so, that it is impossible to guess exactly what the last few feet of a mountain looks like until one gets there. These assertions can be easily

verified by anyone who will go, for instance, to Bar Harbor, Maine, where, a couple of miles from the steamboat landing, rises Newport Mountain, 1,060 feet in height. Go all round Newport Mountain and from nowhere, except from the higher summits of Drye and Green, can you form any conception of what the top of Newport Mountain looks like, until you get to the top. It is evident that since Messrs. Browne and Parker did not reach the top of Mount McKinley and did not see it nearby, they do not know and cannot say what it does look like.

Archdeacon Stuck describes what the summit of Mount McKinley looked like when he was on it and he gives a photograph of it. The photograph agrees fairly well with the description, but it is so poor, apparently from an unfortunate double exposure, that it might be a photograph of almost any snowy mountain top. Nevertheless it has certain characteristics of its own, and these agree closely with the characteristics of Cook's photograph of the top of Mount McKinley, considering that one represents a snow top and the other a rock top.

Stuck's description of the summit of Mount McKinley "a little crater-like snow basin, sixty or sixty-five feet long and twenty or twenty-five feet wide, with a haycock of snow at either end" presents one unique particular, and that is the "little

crater-like snow basin." As far as I know, such an occurrence has never been reported before of any mountain top which rises above the snow line, unless of some volcano where the fires are not entirely extinct and where subterranean steam melts the snow, as it does on top of Mount Tacoma. A small crater-like snow-basin on ordinary mountain tops would inevitably soon fill up with snow and be a basin no longer.

Now this little sixty by twenty foot crater-like snow-basin ending in two snow haycocks was not built on vacuity. It must have had some kind of a rock foundation. And this foundation must be a short rock arète, with probably a knob of rock at each end.

If now one looks at Cook's photograph of the top of Mount McKinley it will be seen that behind the flagman is a little knob of rock. It is nearly as high as the flagman, and it is also beyond the flagman, perhaps some fifty or sixty feet away. It seems, therefore, almost certain that the top is a short arète, possibly somewhat slanting, rising at each end into a rock knob, of which the one where the flagman is standing is the highest. And on such an arète snow might well pile up, as Stuck reports, with a haycock of snow at either end. The angles of the snow top where the men appear ghost-like in Stuck's photograph also correspond closely with the angles of the rock top where the flagman

is standing in Cook's photograph. In fact the rock formation in Cook's photograph seems just about the proper foundation for the snow formation in Stuck's photograph.

Stuck's own words about the top "looking as if every violent storm might somewhat change its form" moreover are of great import, in showing that Stuck himself recognizes that the top of Mount McKinley changes rapidly. It is first of all possible altho not probable that, since Cook's ascent, the rock top itself was changed in its configuration by the great earthquake: but this is one of those points which is beyond argument, for it can neither be proved nor disproved. Now not only may, as Stuck himself points out, storms change the top of Mount McKinley, but they undoubtedly do. The season of the year and avalanches likewise surely bring about changes at the immediate summit. The rock top in Cook's photograph is certainly steep enough for piled up masses of winter snow to slide off it thru the force of gravity and to go careering down hill.

14. Lloyd tells us that on the Southern summit he "couldn't find any rocks or any formation in which the flagpole could be placed permanently." Later on in his narrative, Lloyd says "If Dr. Cook had made the summit * * * he could not have escaped seeing samples of the rock on that summit and near it." What is one to infer from

this? Apparently Lloyd, a miner, noticed some rocks near the summit, which seem to have attracted him, possibly because they suggested "pay-dirt" to him. Cook was not looking for "pay-dirt" and doubtless would not know it if he saw it. But Lloyd's statement corroborates Cook in that it shows Lloyd saw some rocks near the summit.

Archdeacon Stuck states positively that there is no rock of any kind above 19,000 feet on the South Peak and that everything is permanent ice and snow. Now there is no such thing as permanent snow and ice on a mountain peak. The snow and ice, whether in solid form or in melted form as water, are obeying the law of gravity and sliding down hill all the time, and their place is filled by fresh precipitation from the heavens above. About rocks, Stuck's photographs do not agree with his words. His photograph of the North Peak shows plenty of rock in June: why should there not be some visible on the South Peak in September? And still more important is his photograph entitled "Denali's Wife from the summit of Denali."[85] There, as was first noticed by Mr. E. C. Rost, of Chicago, in the immediate foreground, is an outcrop of rocks. They can scarcely be more than two or three hundred feet from were the camera was placed. Since that

[85] *The Ascent, page 102.*

photograph was taken on top of the South Peak of Mount McKinley, it proves that, even in June, some rocks are exposed nearly up to the top of the South Peak.

15. The only relic of any of the expeditions seen so far by a later expedition is the pole which Lloyd erected on the North Peak and which Stuck reported seeing three years later, and it is certainly lucky for Lloyd that he did plant this pole, for otherwise his ascent of the North Peak would be denied just as his ascent of the South Peak is denied. Cook unfortunately had no such pole to set up as a memorial of his success and the small metallic tube he says he left on top must have been covered with snow when Lloyd and Stuck reached the summit. Stuck could not find the relics which Browne says he left somewheres near 19,000 feet. But even if Browne's relics or those which Stuck says he left at about 18,000 feet and at about 15,000 feet are found hereafter, proof will only be given that these climbers reached 19,000 feet or 18,000 feet or 15,000 feet respectively. The relics left by the various climbers, therefore, with the exception of Lloyd's pole, are of but little use as proofs of the ascents.

16. From the top of Mount McKinley, Cook had a good view of some sections of the surrounding country. Much of it was hidden by clouds drawn out in long strings and by big cumulus clouds,

which screened the lowlands and which were entwined round the lesser peaks. To the south Cook had an unobstructed distant view, looking over nearby clouds, which therefore lay exactly over Mount Foraker. Lloyd states that on both days when he was on the summits of Mount McKinley, it was bright and clear at the top, but that fogs and clouds obscured the view below. Mount Foraker, thus, was hidden by clouds from Lloyd as it was from Cook. Stuck had an exceptionally clear view of the nearer surroundings of Mount McKinley. He seems to have been especially impressed with the appearance of Mount Foraker and thinks every climber of Mount McKinley would mention the sudden splendid sight of this great mountain. And the fact that Cook does not do so, is one of the arguments Stuck advances to show Cook did not climb Mount McKinley. That Lloyd also does not speak of Mount Foraker is simply passed over by Stuck in silence. But how could Cook or Lloyd have spoken of seeing Mount Foraker since, from their accounts, it is evident that, when they were on top of Mount McKinley, Mount Foraker was, at any rate to some extent, veiled by clouds?

17. A remarkable proof of the success of Cook and of the success of Stuck are their observations about the sky at the top. Cook, at ten o'clock in the morning, writes "that the sky was as black as

that of midnight," and later "of the curious low dark sky" and "the neutral gray blue of space." Stuck in turn writes: "We first noticed the darkening tint of the sky in the Grand Basin, and it deepened as we rose." "It was a deep, rich, lustrous, transparent blue, as dark as a Prussian blue, but intensely blue." Here is one of those details which a man does not invent: he either observes, or he remembers something he has read. Knowledge of this phenomenon, however, is rare, for, as Stuck remarks, such a dark blue-black sky has almost never been mentioned in print. Almost the only notice I can remember about the dark skies of high altitudes is one by Mr. Charles Packe,[86] about the Sierra Nevada in Spain: "The sky, too, on looking overhead, seemed to maintain its usual pale blue tint. Neither on this, or on any other of our ascents, did I once observe that deep black indigo which almost always prevails in the Alps and Pyrenees at heights exceeding 10,000 feet."

It may indeed be questioned whether such a dark sky is a constant phenomenon on high peaks. That Cook speaks of it as black or neutral gray blue, and Stuck as blue may be due to the color of the glasses the two observers wore: Cook's were probably the usual smoke color: Stuck's were amber color.[87] Unquestionably, moreover, the dark

[86] *The Alpine Journal*, 1868, Vol. IV, page 119.

[87] *The Ascent*, page 37.

glasses lead the observer to think the sky is darker than he would see it without glasses. In regard to the color also—black or neutral gray blue with Cook, Prussian blue with Stuck, black indigo with Packe—my own memories of high peaks would lead me to call the darker skies above snowy Alps, as I should also designate the shadows on distant snowy peaks, French ultramarine, that is a purple blue, which lightens up if the glasses are removed.

The illustration of the top of Mount McKinley in Cook's article in *Harper's Monthly Magazine* for May, 1907, does not present the dark sky. It seems to be a drawing in black and white, possibly made over a photograph. The sky is a blank white, and the rocks have no character. Doubtless the original photograph was considered too rough for a popular magazine, and so the genuine article was thrown aside, and a popular substitute presented.

Fortunately, in *To the Top of the Continent*, Cook's original photograph of the top of Mount McKinley was published just as it was, with all its supposed imperfections and no magazine improvements. And it is a detail of great importance in this matter. The sky in the photograph is very dark: the camera noted it. Blue, moreover, is a color which photographs paler in value than other colors. For some chemical reason, in a

photograph, blue reproduces lighter than its true depth or value as a painter would say. Orange, on the contrary, photographs darker than its real value. Cook's photograph, therefore, proves that Cook did not manufacture his description from knowledge acquired from books: the sky in the photograph proves the photograph was taken at the top. Stuck's observation of the dark sky also proves Cook's veracity, and there is perhaps no one statement of Stuck which proves his own ascent as completely as his observation of the dark sky at the top: but it is passing strange that the best comparative proof of Stuck's ascent is presented by Cook.

18. The descent of Mount McKinley was made with great rapidity by Cook and Lloyd; much more slowly by Browne and Stuck. Browne was still overweighted by baggage on his descent; and Stuck's pace was handicapped by the shattered condition of the Northeast ridge. The statements of the four climbers about the times taken in their descents tally perfectly with the conditions they report.

19. The great earthquake which shook Mount McKinley in its very bowels and which Browne describes so vividly makes it evident why Stuck found the Northeast ridge so different from Cook and Browne. How much the earthquake affected other parts of the mountain Stuck does not say,

but it may easily have changed more than one piece of its configuration, and for aught we know, it may have altered the top of the Southern summit entirely since Cook's and Lloyd's visits.

V.

CONCLUSIONS.

The conclusions which comparisons of the statements, denials and observations of the four claimants to ascents of Mount McKinley seem to warrant, may now be summed up in a brief resumé.

The denials made in turn by each of the last three climbers about his predecessors, amount to very little. For none of these three men really acts the part of a critic. Lloyd attacks Cook about places where Cook never went. Browne omits the facts about Cook and has nothing to say of Cook's ascent beyond 12,000 feet; he barely notices Lloyd and only to say he did not see Lloyd's flagpole. Stuck says of Cook that Mount McKinley cannot be ascended from the south and he flatly denies Lloyd's achievement of the highest peak. But one can not thus criticize mountain ascents. One can not omit the facts. One can not destroy everything connected with an ascent by the naive expedient of not mentioning it. A mountain historian, in order to judge of an ascent, must examine into its details, and this the later climbers of Mount McKinley either do not do at all or barely do about the ascents of their predecessors.

There are three claimants to the absolute top and one to the almost absolute top of Mount Mc-

Kinley. One party approached the mountain from the northeast; the other three from the northwest. At a point between about 11,500 feet and 12,000 feet, the routes of the four parties met, and from there to the top, their routes appear to be identical.

Each claimant published a narrative of his experiences. Cook's account was published in 1907, three years before Lloyd's account, published in 1910. This again antedates by two years Browne's account, which itself comes one year earlier than Stuck's account. The priority of publication of the description of the northern route up Mount McKinley from 12,000 feet to the top, therefore, belongs to Cook. And this priority of publication is evidence of insuperable importance in regard to the first ascent of Mount McKinley.

The four narratives are not absolutely similar; each one is tinged with the individuality of its author. None of the narrators noted identically the same facts thruout. But in the main each narrator described, as best he could, the same things. All four narrators report, each in his own personal manner, their nearly similar feelings about their fight against the cold and the rarefied air. Cook, Browne and Stuck describe clearly, between the meeting place of their routes up to about 15,000 feet, their dangerous climb up the same knife-edged arète with, at places, slopes of 60°.

Just beyond 15,000 feet, Cook, Browne and Stuck all turned to the Upper McKinley Glacier, in the neighborhood of the same great granite rock slabs. All four climbers describe fully the Upper McKinley Glacier and its vast snow fields, the rocky ranges leading to the twin summits, and the easy slopes on which there are no mountaineering difficulties and which continue between the boundary ranges to both summits of the mountain. Cook, the Arctic and Antarctic explorer, reports the ice-blink over the Saint Elias group. Cook and Stuck both report the so seldom noticed dark sky at the top. The coincidences of detail thruout the four narratives are numerous; too numerous and too evidently genuine to be fabrications.

In the nature of things, some mountain historians are bound to take up at some future time these ascents of Mount McKinley and to investigate them anew. And they may be relied on to do so in the same spirit which mountain historians have always acted on so far, namely to see that the first shall be first and the last shall be last, and to base their judgment, not on the vaporizings of the later climbers of the mountain, but on the facts. And the facts seem to be, that the four climbers who say they have been on or nearly on the top of Mount McKinley told the truth, as well as they knew how, about their experiences. That Cook, Lloyd,

Browne and Stuck, reporting as they do, tho in different words, much the same facts and much the same experiences, corroborate one another. And therefore the final verdict will surely be that Cook made the first ascent of Mount McKinley; Lloyd the second ascent of the South Peak and the first ascent of the North Peak; Browne an almost complete ascent of the highest summit; and Stuck the third ascent of the South Peak.

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